JOURNAL OF THE

AMERICAN INSTITUTE OF ARCHITECTS

Vol. VI JULY, 1918 Number 7

CONTENTS

Page

FRONTISPIECE—SAINT GERMAIN ARGENTAN. Drawn on stone by Charles Z. Klauder . 326

SHADOWS AND STRAWS 327

LITHOGRAPHY IN ARCHITECTURAL ILLUSTRATION 329

THE CIRCEAN SHADOW! V . . . . . *Richard Wallace Tudor* 330

THE FIRST WAR EMERGENCY GOVERNMENT TOWNS. II. Hilton, Virginia
Henry V. Hubbard and Francis Y. Joannes 333

RECONSTRUCTING THE DEVASTATED AREAS IN FRANCE. (Illustrations) . . . 346–351

PLANS FOR THE REHOUSING OF THE WORKERS OF ENGLAND. (Illustrations) . . 352–358

ARCHITECTURE AFTER THE WAR 359

TRANSPORTATION OR HOUSING 363

NEWS NOTES 363

INSTITUTE BUSINESS 366

Published Monthly by

THE AMERICAN INSTITUTE OF ARCHITECTS

1159 Mulberry Street, Harrisburg, Pa. The Octagon, Washington, D. C.

Committee on Publications

FRANK C. BALDWIN, *Chairman*
BEN J. LUBSCHEZ
H. VAN BUREN MAGONIGLE

CHARLES HARRIS WHITAKER, Editor
The Octagon

C. GRANT LA FARGE
CHARLES L. BORIE, JR.
THOMAS R. KIMBALL

50 CENTS A COPY. $5 PER YEAR

Checks or P. O. orders should be made payable to The Journal of the American Institute of Architects, and mailed to The Octagon, Washington, D. C.

Copyright, 1918, by the American Institute of Architects. Entered as second-class matter, December 20, 1912, at the Post Office at Harrisburg, Pa., under Act of Congress of August 24, 1912

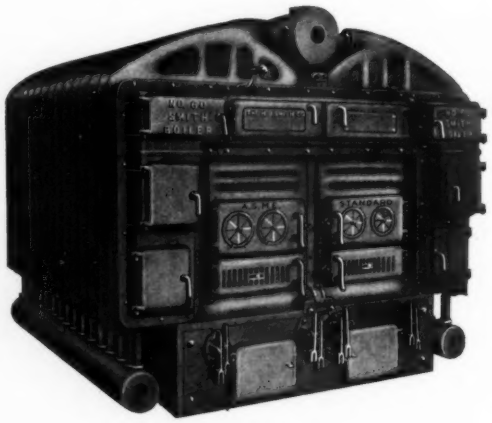
THE H. B. SMITH CO.

WESTFIELD, MASS.

NEW YORK
10 East 39th Street

PHILADELPHIA
17th and Arch Streets

BOSTON
138 Washington St. No.



Front View

Boilers Manufactured

FOR

Low Pressure Steam and Hot Water Heating

Mills Water Tube

SMITH { With Smokeless Furnace
With Grate Reduced
With Grate Full Size

H-B and Menlo

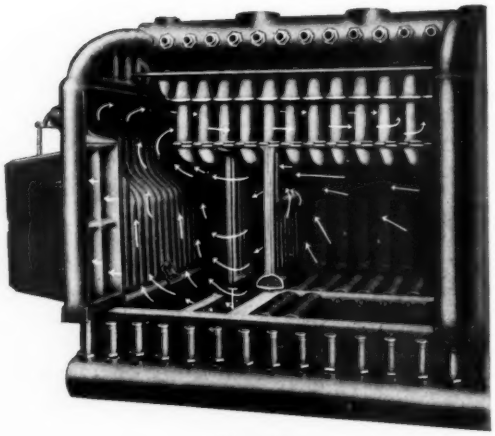
FOR

Hot Water Supply

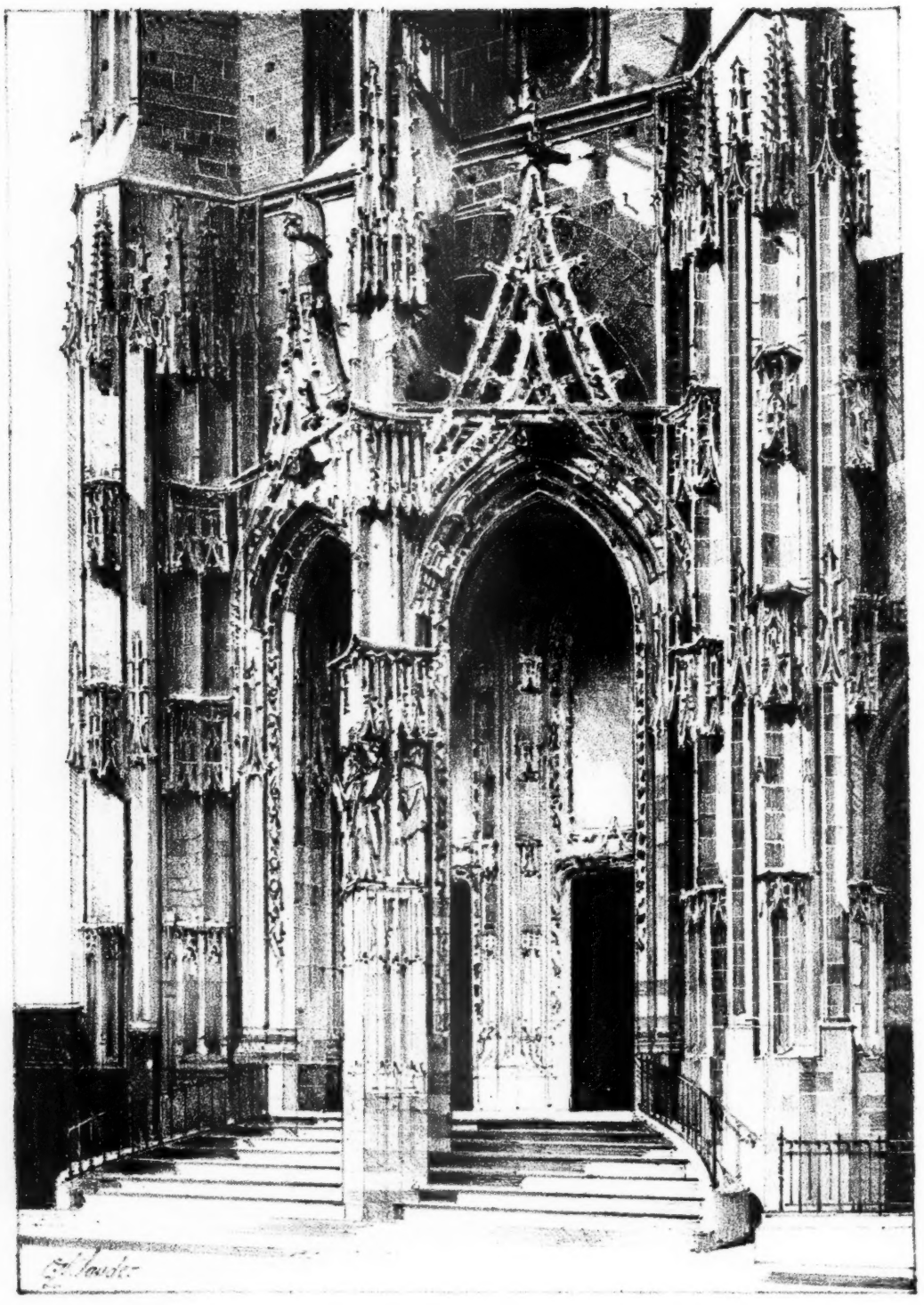
Smith Service Boiler

Radiators Manufactured

DIRECT
SINGLE, TWO-, THREE-,
FIVE-COLUMN
AND WALL



Interior
Smokeless Furnace



Saint Germain Argentan

Drawn on stone for
The Journal of the American Institute of Architects
by Charles Z. Klauder

JOURNAL OF THE
AMERICAN INSTITUTE OF ARCHITECTS

Vol. VI JULY, 1918 No. 7

Shadows and Straws

CONGRESS HAS APPROPRIATED the sixty millions of dollars asked for by the Housing Division of the Department of Labor. The long delay is not without some compensations, however, since Secretary Wilson has caused it to be announced that the policy to be pursued in the expenditure of these funds will mark a considerable step in advance over the plan which was originally put forth. It may be that a too tenacious adherence on the part of those who persistently advocated the vicious theory of lending money to corporations was responsible for some of the delay, but we are now assured that the Housing Division of the Department of Labor proposes to conduct its operations after the manner pursued by the Ministry of Munitions in England; that is, the Government will buy the land, build the houses, and operate them during the period of the war. As changes of opinion and practice are effected in the ordinary course of events, the nation may well be congratulated that the opposition to this simple and straightforward course has been so soon broken down. Now we have a clear field for progress. Those who struggled first to secure a direct advantage from the use of Government money for housing purposes; those who persisted in pointing out the difficulties in breaking away from the traditionally bad system under which in the past we have with such futility essayed a solution of the house question; as well as those who hoped to compel a method of financing which would leave open the loophole for future speculative profits to be taken at our national expense, have been overcome by the better judgment of those who sought only the interest of the nation, in war as well as in the peace to come. The United States now has a fair field before it in which to demonstrate that it is able at least to do as well as the countries of Europe have done in meeting the problem of no houses and bad houses and abominable houses.

COMMENTING UPON THE QUESTION, the *New Republic* in its issue of June 22, had the following to say:

"The misfortunes which have so far attended our progress in providing houses for war workers are due almost entirely to our inability to see the problem as a social one. We have been blind to all but its economic aspect. In our eyes a house was a house; a commodity subject to the laws of supply and demand; a thing which gave a landlord his right to the highest rent, and which the tenant had to accept, no matter what its conditions, and as to which the prime consideration was not the quality of life possible in it but its financial return to the owner. Having so long seen houses as property, and not as possible causes of congestion, was it to be expected that we should on a sudden, when confronted with a war shortage in houses, begin to see our problem with clear eyes?

"As soon as the danger of a shortage became evident, every man owning tenement house property was at once frightened almost out of his wits. What, he asked, would the Government do? Would it establish such a new standard in houses as would jeopardize or ruin his investment? Would it embark upon some Utopian scheme that would upset all the machinery to which he was used and in which he had confidence? How in the world was it possible that we had to build houses in order to win the war? We had already begun to build so many new things—ships, aëroplanes, docks, warehouses, nitrate plants—and now somebody wanted houses. Why not tents for workmen, or bunk houses, or shacks, or old freight-cars? Why not solve the problem by transportation? There must be plenty of

houses somewhere. Surely we could find a place to put workmen, and surely the workmen would not care what kind of a place it was, so long as they were working for their country. . . .

"There is no doubt that certain sinister selfish interests have been trying to have their way with the organizations of the Housing Divisions of the Department of Labor as well as of the Shipping Board. The constant vacillations of policy, the endless countermanding of orders, the ceaseless interruptions of projects which forever start and stop, all indicate the adroit hand which opposes everything which seems likely not to yield a favor in some quarter. But public opinion is asking with growing insistence questions that require an answer. Why are not the houses built? In the face of the crisis on the western front, who dares play with the fate of our soldiers or with those of our Allies? What do the long delays mean? Who is responsible? Why should there be two housing departments of the Government? Why should two organizations be dealing with the same problem in the same community? What does it all mean?"

It means a day of reckoning for some, and an opportunity for others who have had the patience and the courage to stick at their post and ceaselessly combat the sinister selfish motives, the "adroit hand," and the pitiful incompetence of some of those in superior positions. This is not the moment to indulge in historical narratives; the time for those is coming. It is now the time to lend a hand in every possible way toward the speeding up of the intelligent program which has finally prevailed, and also to begin an active campaign to so support the Department of Labor in its work that when the time comes for the Government to dispose of its holdings, the way may not only be left free but the wish may be so universal as to assure a transformation of these governmentally created properties into self-owning communities, on the principle of the co-partnership tenants method which has been so successful in England. The time has gone, let us hope never to return, when our quest of a solution for the housing problem can be beguiled with the mirages which have so long been dangled before our eyes.

Is It Not Now Perceived that the products of a nation must be measured in terms of life and not in terms of industry, commerce, and trade? That all the social problems which, as by-products of our economic system, are thrown athwart our path, depend for their solution upon a standard of values which places the quality of national life above and infinitely beyond all other values? That the house problem is essentially a basic problem, and that if we pursue our senseless methods of the past—methods which we borrowed wholesale from Europe, where they are now certain to be discarded—we shall merely repeat over and over again the destructive cycles of slums and congestion which nation after nation blindly accepted, caught in the toils of the industrial exploitation of life which England set as the successful pattern, and from which none dared to deviate lest financial failure attend as the costly penalty.

The house question is one of the prime phases of the problems of national life, of industrial freedom, of democracy in the full measure of the word. Until it is treated as such and considered in the light of a system which measures in terms of humanity and not in terms of money, goods, products, and business results, we shall continue to delude ourselves with the belief that we are building a nation, whereas, as the examples revealed by war have now shown, we are merely destroying, as other nations have done from time immemorial.

Most of the Work, if not all, of that illustrated in this issue of the Journal, related to the problem of repatriation and rehabilitation of the districts first ravaged by Germany, has been lost in the recent German advances. But an idea of the work which will still have to be done, on a tremendous scale, may be gained from the photographs which were sent to the Journal through the kindness of Mr. George B. Ford, who is now in France and who has been connected with this work for nearly a year.

There Are Published in This Issue a preliminary group of the winning drawings in the competition held by the Royal Institute of British Architects for plans for low-cost houses. The report of the Jury of Award has not yet reached us, but it is hoped to publish it in the next issue of the Journal, together with others of the winning drawings. It will be noted that the British Isles were divided into sections and that the competition was based on the sectional traditions and requirements.

In low-cost houses, where the maximum of room is desired, group houses are the only answer under present economic conditions, but this does not mean that life, for the occupants, must be consigned to a monotonous row of

characterless structures. Quite the contrary, when these undertakings fall into skilled hands, for then it becomes possible to vary the design and to give something of individuality to each house.

Reflections of the architectural charm which English architects are able to give to their solutions of low-cost group houses are not so easily achieved in this country, where we find ourselves without the primary tradition upon which so much of this charm depends—the coincidence of first-floor levels with that of the immediate surroundings. In fact nothing has been more effective in destroying the appearance of so much of our domestic architecture, even though it be devoid of any particular pleasantness, than the habit of raising the first-floor level from two to three feet.

Lithography in Architectural Illustration

TO Mr. Charles Z. Klauder, of Philadelphia, we are indebted for the first of what it is hoped eventually may become a series of drawings devoted to a modest attempt at a revival of the art of lithography in architectural illustration. Time was when a group of artists in France, together with a smaller number in England, were making lithographs of architectural subjects by thousands, and perhaps it is to their efforts that we owe our grateful appreciation for the preservation, in print form, of so much of the historic and picturesque architecture still extant in Europe a century ago. Lithography came last, in the field of the reproductive processes, but it was quickly appreciated by the painters and engravers of France, for in it they found a process for making illustrations which was admirably suited to the purpose. It dispensed with the tedious acquisition of the engraver's skill, and to those who had declined to attempt a mastery of the technique of the line engraving or the mezzotint, the etching or the wood engraving, lithography offered a process in which no second artist came between them and their work in the office of interpreter. To make a lithograph, it was practically necessary to know only how to draw, although in working directly on the stone it was of course necessary to draw in reverse; but even this difficulty could be avoided by the use of the transfer paper, on which the drawing was made with the lithographic crayon and from which it was transferred to the stone.

For much of the best of the lithographic illustration of architecture, we may thank Baron Taylor, who conceived the idea of publishing, in serial form, an illustrated work which should picture France from end to end. "Voyages Pittoresques" was the title of his work, and for the illustrations he chose the best of the lithographers then available; Bonington and Isabey, whose work has already been treated in the Journal, and whose lithographs are among the finest that have ever been made. Then there were Ciceri, Sagot, Gaildrau, Benoist, Huet, Bayot, and a host of lesser lights, who journeyed over the provinces of France intent on the really colossal undertaking. Its very vastness was, in a measure, its undoing, since it never could be completed and involved a great loss, but it left us a record which has become more priceless than ever, today, since much of the architecture so faithfully drawn has now disappeared forever.

In the middle of the last century, or, roughly, from 1820 to 1860, lithography rose to heights of great splendor. Scarcely an artist in France who did not essay the smooth-grained stone which came from the famous quarries of Solenhofen, in Bavaria. Raffet and Charlet set down the record of the Grande Armée in imperishable form. Gericault, Delacroix, Gavarni, Daumier, Laurens, Francais, in France; Rops, in Belgium; Haghe, Boys, Prout, Nash, in England, were wooing the lithographic stone with a result which every lover of lithography knows, and for which he is grateful.

Whistler recognized the process with that unerring knowledge which infallibly guided him in the choice of a method to fit the message which he had to give. What are more beautiful than the nocturnes which he drew from the lithographer's stone? And yet, withal, the process was too susceptible of being turned to commercial use. By the close of the last century, it was said that there was not an artist litho-

grapher left in Europe. This was of course not wholly true, and is not true now; but it is true that most of those skilled in the art were by that time at work in the great lithographic establishments which grew apace, as the facility of the process and the possibilities of cheap reproduction on a vast scale, set a new business in motion.

It was at the beginning of the nineteenth century that Alois Senefelder discovered, quite by accident, that it was possible to draw with a greasy crayon on stone and then print from the stone without engraving it. This was possible because the stone which he hit upon had an affinity for both grease and water. Thus in passing the ink roller over the stone which had been drawn upon with the greasy crayon and which was kept wet with water, the ink from the roller would adhere to the crayoned lines, while the rest of the stone, being wet, would reject the ink. That, in substance, is the simple foundation upon which the process of lithography rests. It has not been improved upon since Senefelder discovered it, in any artistic sense, although modern commercial lithographers have advanced the mechanical equipment far beyond the simple press of Senefelder's day.

The lithograph which Mr. Klauder has made illustrates one method of drawing on the stone, but it might be said, perhaps with all truth, that there are no limitations to the effects which may be produced. Fantin-Latour even went so far as to cover his stone with grease and then scrape away to get his whites, just as a mezzotinter scrapes away after he has rocked his plate. But between the extremes of this process, and the simpler one of working from white to black, all gradations are possible. No process offers such facilities for reproduction in a fashion that may quite honestly be said to make each copy an original.

Some of the work of the great lithographers who drew in architecture has been illustrated in the Journal. Other work is to follow, and we hope, from time to time, to publish more original lithographs from the hands of members of the architectural profession in the United States. Good lithographs, in spite of the obloquy which has attached itself to the process, are still as beautiful as ever. Their place in the collector's cabinet is forever secure.—C. H. W.

The Circean Shadow! V

By RICHARD WALLACE TUDOR

IF, as I have advocated, the student devote the greater part of his time during the early part of his work to a study of the social and the economic aspects of architectural expression, one will ask how is he to acquire the technique necessary to enable him to get a job and hold it? A practical and an extremely important question—but nevertheless one which does not concern me overmuch, for I have faith that the *really inquisitive, ambitious* person will acquire the technique once he be given an opportunity so to do. Looking broadly at the problem, we are confronted with making a definite choice, it seems to me, between developing men who can mechanically repeat certain office-practice-like operations and men who can really think. I suggest that we emphasize the development of the latter sort.

And so, throughout the period of educational influence, we should keep constantly in mind that if we so deal with the student that he becomes thoroughly impressed with the importance of knowing a thing, we need have little fear that he will fail to acquire the necessary knowledge, provided he be afforded reasonable facilities. When the student becomes thoroughly convinced that he actually requires a knowledge of mathematics or graphic projection, perspective, shades and shadows, construction or a thousand and one other things *in order that he may more clearly and accurately express* himself, then, and then only, need he be assisted. With

that large group of students who are being educated in architecture because it is a genteel calling, or who are merely doing their work to get a degree, or the inept student, I have not the slightest interest. The sooner they are eliminated from the schools the better will it be for all concerned.

To most of us, educated in the old way, the elimination of the "task," the substitution of "interest" for "duty," is placing the cart before the horse. But is it not precisely the process through which the races have developed? Are not our errors the result of our failure to proceed along this line?

I am quite ready to propose seriously that we now eliminate much of the purely technical matter which occupies the greater part of the student's time; yes, eliminate it completely, if by so doing we can, within a reasonable period of years, bring him into contact with the real fundamental problems related to the practice of architecture. What, precisely, does the student gain from the time devoted to the study of "construction"? He acquires a little technique, so limited as to be of extremely little value to his employer and an actual handicap if he begin practice immediately upon graduation when his sureness is certain to lead him into error. He is told the theories of an endless variety of things; rarely does he acquire sufficient knowledge to make him safe or responsible. He is told how to figure beams, a truss or two, and to detail window-boxes, and these operations he learns to perform most superficially.

But he learns little or nothing about the "problems" of construction which develop in the world of reality; about these he must learn. He is not made aware how stupid, temporary, and flimsy are the things we build; neither is he made inquisitive and *rebellious* concerning the utter lack of relation between the forms used as decoration and those used for purely structural purposes.

And so our educational program in this respect must bring him into actual contact with the problems of construction in the field, and this contact must be made before we may intelligently discuss theory with him. A part of his education—and a very important part it is—must be the actual fostering of a spirit of active rebellion against an almost universal condition in building wherein structural forms and forms of "design" are not one and the same.

In the engineering school the central idea in all "design" is "efficiency" in the application of materials; form is conceived to be the resultant of certain mechanical laws applied in the using of materials.

In the school of architecture in theory the same idea prevails; but there, in practice, form is not the resultant; it is rather something made stable by a clever twist or application of such laws. The engineering conception and application is narrow; the architectural false and contradictory. When made the central theme in education, both render the "educated" impotent to think clearly in terms of "design."

In the larger sense "design" must comprehend the real purpose for which material is fashioned by work into things—if the design is to be truly worthy. It is in this respect that our education and the education of the engineer falls short. The purpose made vivid by the mass of formula directed toward "efficiency" is so limited as to obscure the social, humane purpose which should actuate all effort. And so it is that the student, seeing only the narrow purpose of the formula, becomes materialistic, for what is there to inspire when "efficiency" is seemingly the only end in view.

I do not suggest that we should assume toward structural design other than a scientific attitude, but I do suggest that science, if it is to contribute toward rational living, must have other than the narrow aims expressed by the ideas associated with "economic" and "efficiency." To eliminate from "efficiency" as we do the social and spiritual is to render it of negative value.

How shall we develop a knowledge of construction? What can we substitute for the present limited aims expressed in the teaching? What can we suggest? Supposing that we have nothing to suggest! (How can we suggest, when we were taught blindly to accept?) What does that matter? Will it not be sufficient to have opened the mind of the student to prospects, to possibilities, to have made him thoroughly aware of our shortcomings, to have pointed out the fallacies with which we started? It seems to me that such a program is sufficient; it will clear the road, at least, for the coming generation, and that is surely of some considerable importance, for in it is bound up the future.

For if we do not clear the road we shall have á world filled with columns and beams and girders and wheels and millions of mechanical contrivances—a mechanistic world—top-heavy with equipment with nowhere in particular to live (where life is worth while) and with little else to do than the making of an endless number of contrivances which will afford no one any particular pleasure.

In the similar way, in matters related to decoration, ornament, fabrication, and the use of materials, it is the end to be achieved which really counts. Let the student, by actual observation of the processes of fabrication and of the flimsy temporary products resulting from our present methods, become acquainted with how important a part the condition of the laborer plays in design. Let him in this way arrive at a basis of a fair valuation of the part *he* plays in design. Let the student become fully acquainted with actual conditions; let him grasp some of the real problems related thereto before he attempts to treat the subject in a graphic way. It is not essential that he examine an endless number of processes of fabrication or the use of materials. But it is of tremendous importance that he be made aware that the problems of labor, of craftsmanship and material are so inseparably connected with design that *they cannot under any circumstance be separated.* It is not sufficient to merely say this to a student; *this he must be induced to know and to fully understand through experience, not in the studio, but where things are actually fabricated.* That situations in the field of reality be examined in this connection is just as important in developing architectural expression in form and mass as it is that the student study the social and economic problems in the field before he attempts to formulate a program and its appropriate architectural envelope.

In the same way that collaboration with students in related fields is important from an educational standpoint, so is the student's contact with those who produced the forms and materials which enter into his structures. With all these he must collaborate in his later work, and therefore he should not only learn to collaborate during the early period of his specialized training but he should learn his own limitations. Perhaps the greatest value which would accrue from such collaborative effort and contact would be to teach him that he cannot be a master in all related professions and in all crafts. In other words, we should induce a more accurate self appraisal by showing him his limitations through experience.

I regret the tendency in education which is widening the chasm between related activities; intensive specialization focuses attention upon details—ofttimes secondary details—and narrows the circle of contact and observation. It is by chance rather than direction that there occasionally emerges from our technical schools men who are liberal and sympathetic and who grasp something of what actually determines the scale of relative values by which effort and accomplishment are judged. If the process of specilization in education were directed toward effecting a full appreciation of one's own limitations and, in consequence, a proper valuation of the specialized knowledge of others, a basis of collective action might be established; as it is, a smug self-sufficiency is developed which makes collective effort well-nigh impossible.

We assume in our method of teaching design, by requiring that the student first organize his conception at a tiny scale, that we thereby insure that he will come to look upon his problems from a "broad" point of view; we also assume that in the "indication" at a tiny scale he will include the essentials of his problem. This is a pure assumption which has no relation whatever to fact. He does not conceive his "solution" from a "broad" point of view in reference to actual or liberal needs; he stabs at a solution in which about the only human factor really considered is "circulation." This he provides regardless of actual needs.

In our method of organizing conception at a tiny scale we are right; but we are wrong in assuming that a real solution can be effected except through intimate study of such activities as in themselves direct the outlines of a real solution.

But where does this all lead? What shall we set up as the goal of endeavor? A Paris prize? A trip to Rome? A further study of architecture and the "fine arts"? For some, yes; but, shall we make such a goal the sole aim of study, the sole measure of proficiency? I certainly hope not. That such an aim is now the sole aim is what warps our entire educational system, what keeps it on a single (side) track. Alongside of

this goal we must set up another, one which will be a more adequate expression of the true aims of the profession. But, precisely what shall that goal be? What do we need in America to make a more adequate physical (architectural) expression possible throughout the length and breadth of the land? More monumental buildings? More things? Is it not a better physical organization of our communities rural and urban? Well, if it is, why not make the study of how to bring this about the parallel goal of endeavor? In other words, instead of setting the graduate students to designing this, that, or the other monumental thing—*in the studio*—let us give them a real opportunity of studying the problem of how can we organize governments, municipal, state and federal, so that communities can be developed in a rational way? Send students abroad, but for heaven's sake send some of them to study what the world *is doing*. Send them to Washington and over America; ask them to study conditions in America and make an application of the principles which they find in operation in foreign lands. The field for studies of this sort is unlimited, and it is of tremendous importance to the profession, to the mass of men, and to the state that they should be made. Can we not make such purpose a goal—*the goal* I prefer to say—of the education of the architect? I know no valid reason why we should not.

And lastly; let us wake up and cast out our ever-more-rapidly-breeding "standards," abandon our narrowly conceived technical aims, and inject some social scope and truly imaginative purpose into the activities which we term the education of the architect.

Let us be perfectly open-minded and assign the true values to real educational experiences instead of blindly, thoughtlessly, accepting the contents poured in by institutions.

Let us start, not with Greece and Rome, but with our immediate environment, to the end that we—the profession—may render architecturally significant at least our more rational aims. From the planning of the cottage and its expression in appropriate architectural forms we will expand the circle to include the nation, and in so doing make not only better architects but citizens of a sort we sorely need.

The First War Emergency Government Towns

II. HILTON, VIRGINIA.

By HENRY V. HUBBARD and FRANCIS Y. JOANNES

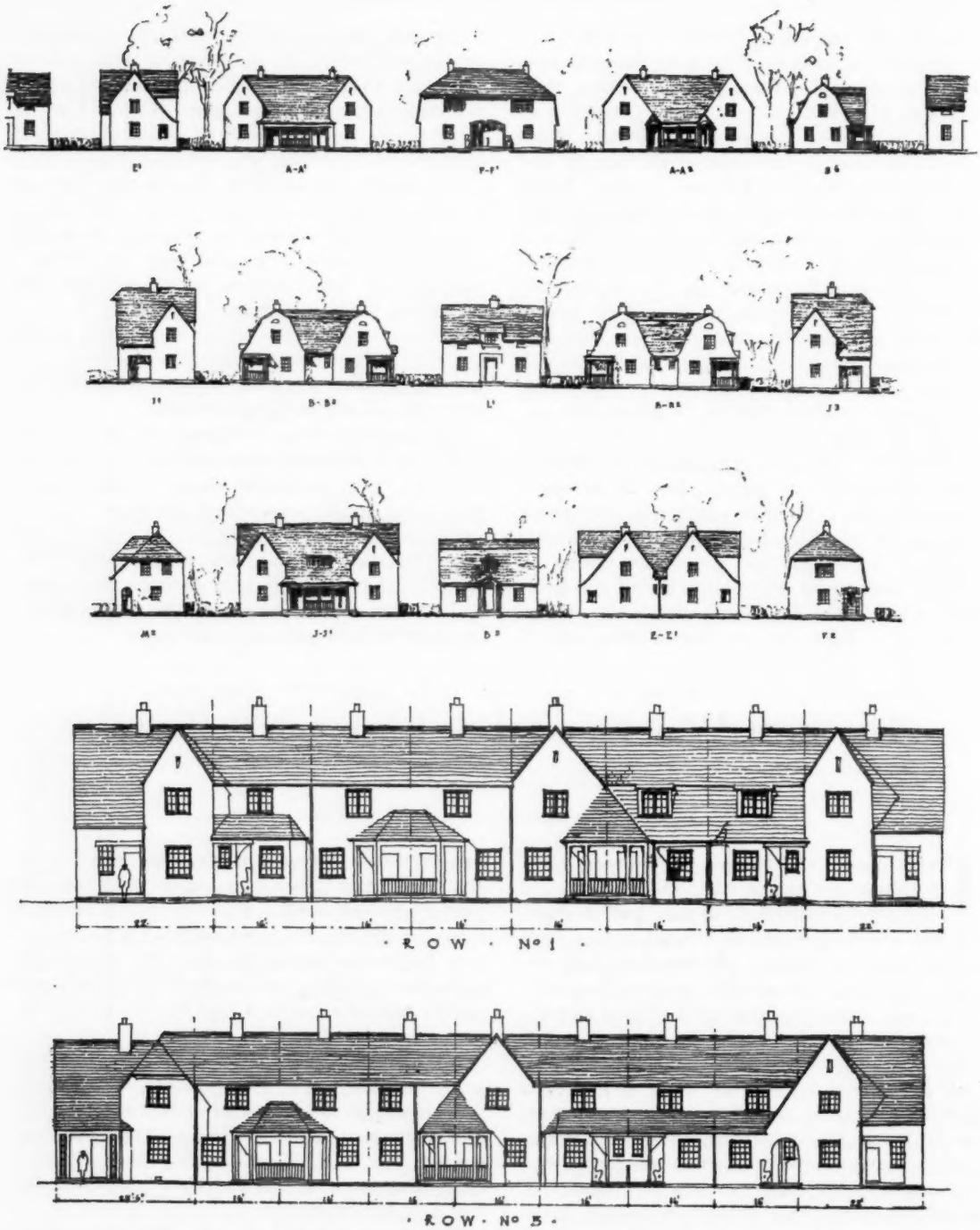
THE present war has put the housing problem forcibly before us in its entirety. In the case of munitions of war, and of ships, it is we, the people of the United States, who are investing the money, who are furnishing the labor, and who are vitally concerned—profit, safety, and honor—in the rapidity and amount of production.

We are at the beginning of the problem; we have not solved it; but we have at last, and after heartbreaking delays, begun to appreciate the vital connection between living conditions, good citizenship, and industrial efficiency, and we have appropriated Government money to provide—among other things—necessary housing for war workers in munition plants and shipyards.

It is evident that this money will be efficiently spent only if it induces the workers to live in the houses and to do their work. The end product of this housing activity is the contented efficient worker, and—of course, without waste, without an unnecessary expenditure of any kind—everything as to living conditions essential to making and keeping the worker contented and efficient is a legitimate item in the list of costs.

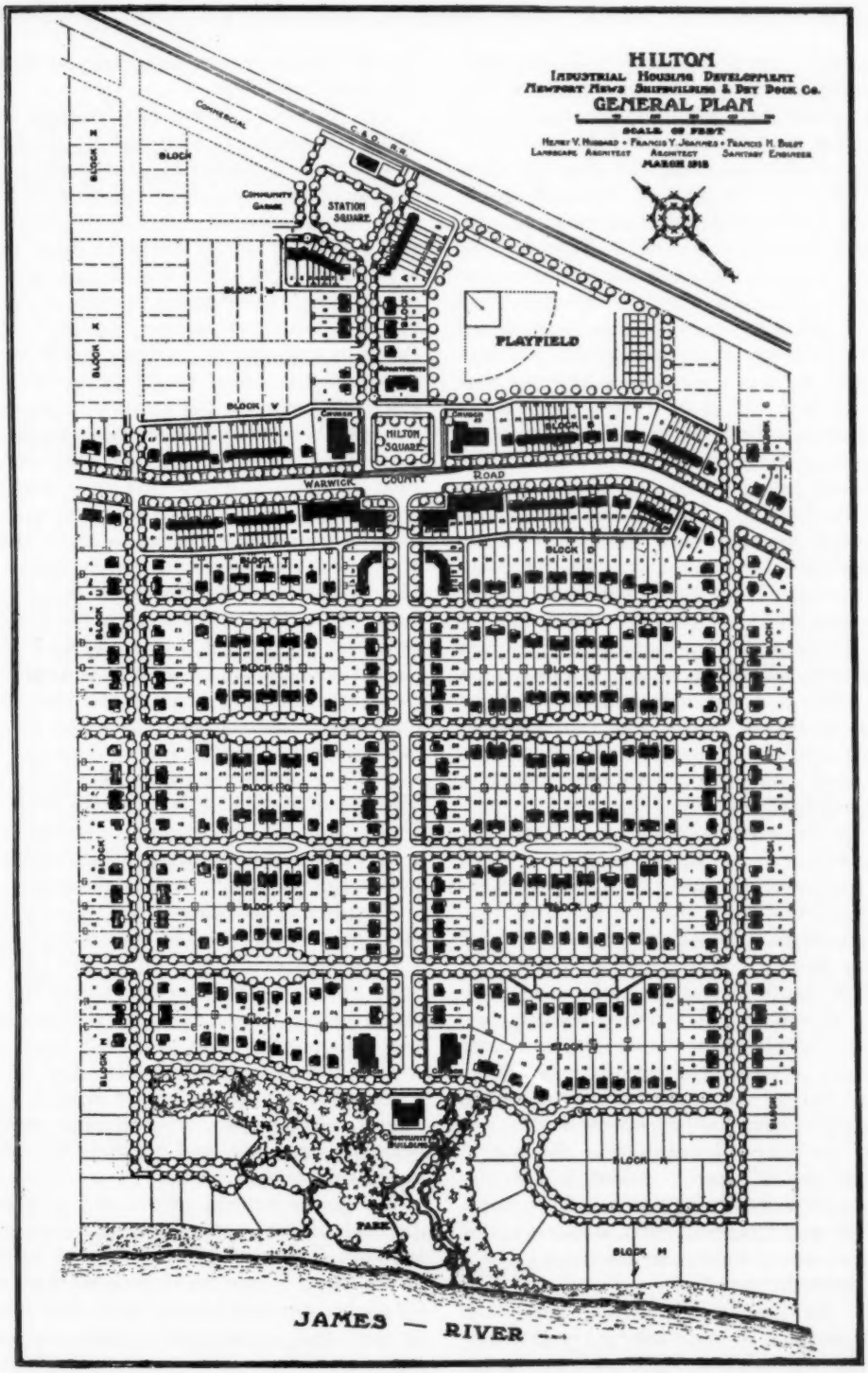
For the unmarried man, who takes up war work whether for high wages, adventure, patriotism, or to be concerned in something big and important, efficient living conditions may consist, for a time, in nothing more than a clean and decent room, a chance for a bath, for rest and recreation.

For the married man with a family, and for every person, in the long run, efficient living conditions comprise all those things which we recognize as necessary to a complete town:



Typical Elevations of Street Fronts and House Rows

HILTON VILLAGE.—A Housing Development Near Newport News, Va., for the Newport News Shipbuilding & Dry Dock Co.
Francis Y. Joannes, Architect



HILTON VILLAGE.—A Housing Development Near Newport News, Va., for the Newport News Shipbuilding & Dry Dock Co
Harry V. Hubbard, Landscape Architect; Francis Y. Joannes, Architect; Francis H. Bulot, Sanitary Engineer

proper houses rightly located and arranged; roads, water, sewerage, fire-protection; stores, markets, churches, schools, theatres, club-houses; parks, playgrounds, playfields, and so on. Any Government industrial housing development which does not find all these things already sufficiently provided must provide, and, if necessary, pay for them itself. Moreover, all these things must be provided, and administered in such a way that the people using them shall do so with self-respect and as their well-earned right, not as a privilege. Americans will not live contentedly in a housing development that looks like a toy village or a state poor farm. Nor will they live contentedly under legal restrictions of tenure and occupancy that encroach too much on their personal freedom, or that express too much the interest of anyone but themselves.

Temporary housing may sufficiently serve the careless bachelor; incomplete living facilities may for the time serve those who have known no better and who can afford no other, but for the trained and well-paid man, permanence as well as decency will be necessary. And we must remember that it is the discontented whom we are trying to content, and a high proportion of the discontented, of course, will be those who recognize and mean to obtain really good and permanent living conditions.

Moreover the world will not come to an end when the war is over. It will be just as vital, and perhaps just as obviously vital, that workers shall be contented after the war as now. Permanent housing may take its place as an integral part of the enlarged and improved town, and as something rather better than what was done before, to stimulate still further housing improvement. Much of its value remains after the war, even if some other industry has to receive a subsidy to encourage its replacing the munitions plant then happily out of work.

But the temporary housing after the war is little better than "scrap;" indeed it may be much worse, and, not being destroyed, degenerates into the worst type of slum, a destroyer of local land-values, a menace to the tenant and a reproach upon the country.

All this, then, is what we must face, as a matter of business, in undertaking Government housing. It is possible to state each particular housing problem roughly in business terms. Let us take for example the Government housing development now under way at Hilton near Newport News, Va.

The Newport News Shipbuilding and Dry Dock Company, as long ago as October, 1917, saw that Government assistance in war housing developments would be absolutely essential, and therefore would sometime be provided. On the advice of F. L. Olmsted they employed J. D. Leland, 3d, of the firm of Loring & Leland, as architect, the writer, of the firm of Pray, Hubbard and White, as landscape architect, and F. H. Bulot as engineer, to prepare a scheme for the development of land for 500 houses to serve the shipyard workers. They hoped, as proved to be the case, that when Government loans for such work finally became available they would have their plans so far along that they might be accepted without great changes and quickly put under construction. When, a short time later, after the preliminary plans had been accepted, Mr. Leland took up his work as assistant director of the Housing Bureau of the Department of Labor, his place was taken by F. Y. Joannes.

This coöperation of architect, engineer, and landscape architect and town planner is an ideal one, reflecting as it does the three great requirements of any such development: Beauty and utility of houses and public buildings; adaptation of public utilities to use, to local conditions, and to consideration of economy; and beauty of ground and adaptation to topography and to the life and growth of the community.

The piece of land chosen was the nearest to the shipyards which could be obtained, of sufficient size and quality. The taking up of land for other governmental purposes forced the site for Hilton about three miles from the shipyards, but both present railroad service and proposed trolley service make it reasonably accessible.

Its cost, for the amount needed for lots, streets, school-sites, church-sites, store-sites, park, playgrounds, and playfield was item one in the calculations.

The payrolls of the shipyards were put at the disposal of the designers, and, reckoning that the normal rent of a house is about 20 per cent of the wage of one adult male worker, we had, for each class of workers, what they could pay as rent, and, consequently, what sum could be expended for lot, improvements, and house complete with all incidental expenses, so that the rent which a worker could afford to pay would

be a fair return, say 10 per cent, on the investment in each case. This tentative lump sum price was item two.

Having determined, by careful investigation among the workers, and consultation over tentative plans with them, and especially with their wives, what sizes and kinds of house they preferred, it was possible to make a reasonable estimate of what such a house would cost.

Having, on the basis of all the local conditions and the known preferences of the workers as to lot sizes, and so on, worked out a tentative plan for the new town, it was possible to estimate roughly what would be the cost of this town, "complete and ready to serve," and by much laborious fitting and changing it seemed to be possible, in this case, to evolve a plan which would produce the necessary accommodations for the possible price, without being obliged to sacrifice decency, permanency, convenience, space, sanitation, nor—we believe—some noticeable degree of beauty. There is a minimum figure below which it is not economy to reduce cost per cubic foot for a house. There is a still more irreducible minimum in water-supply and sewerage. Roads, however, may be sometimes opened but not paved, parks may be set aside but not developed, thus justly postponing until later times the payment for some of the things which are to be enjoyed by later generations.

The land chosen is practically flat from the railroad to within a short distance of the water. Along the shore it is broken by the steep-sided valleys of the two little brooks shown on the plan. The scheme is a modified gridiron, based on a main axis from the town square on the main highway to the community building on the little hill between the brooks, looking out across the James River. The minor streets, running parallel to the shore, some carrying through to future development north and south, some capable of being dead ended, are treated with little neighborhood open spaces for interest and additional feeling of room. The railroad station faces on a little square of its own, connected directly with the town square. A community garage is next the railroad station square.

Two churches, an apartment house, and the few stores surround "Hilton Square," and two more churches, with the community building, give importance to the river end of the broad central street.

The land next the river, divided into larger lots, is held to be used for houses by those who can afford to spend more than the average and who will probably buy and build for themselves. The park occupies the rough land in the brook bottom in front of the community building. The playfield occupies the land on the outskirts of the development next the railroad and south of "Station Square." Neither park nor playfield needs much expenditure at once. They are large enough to serve several times the population at present expected, and the future population may do its share of paying for their development.

The lots vary from 118 to 130 feet deep, since many of the people want gardens. The streets are 50 or 100 feet wide, but the roadways, excepting Warwick County Road, are but 20 and 24 feet wide, because they are, and should remain, local streets, with no possible press of traffic.

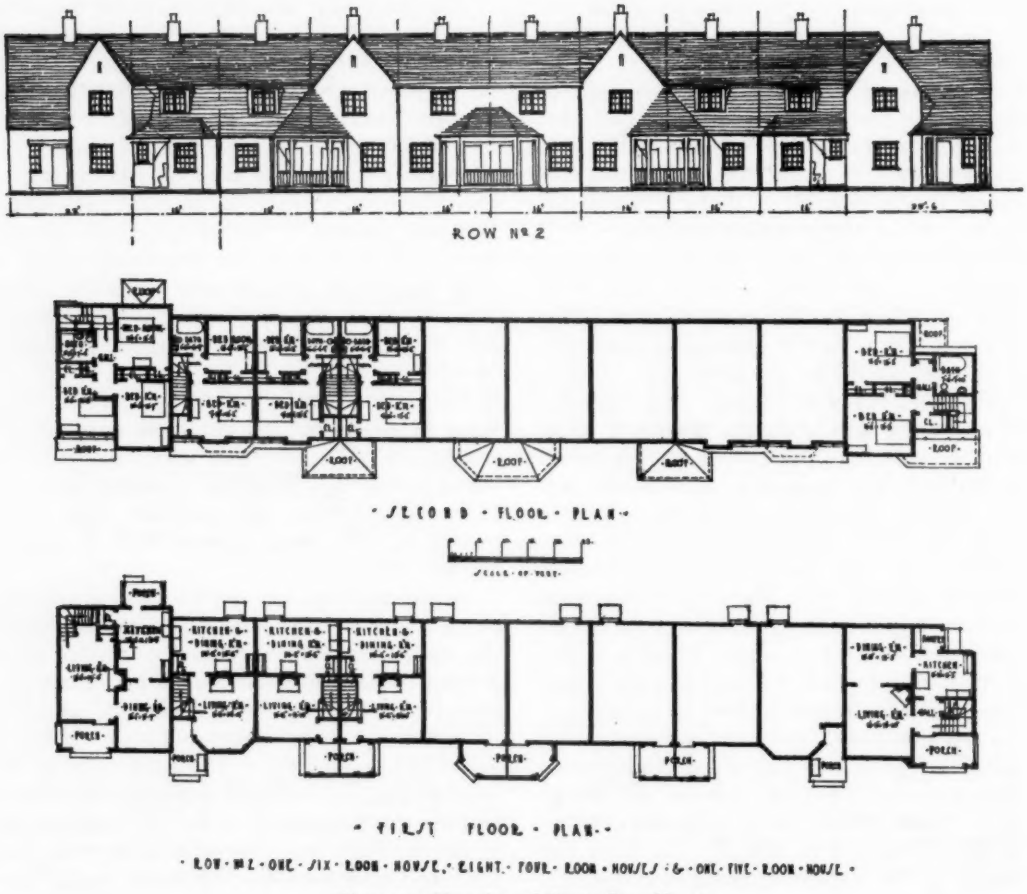
As far as may be expressed in dollars and cents, and not in decency, amenity and content, the appended* figures show both sides of the account: what the householders may reasonably be expected to pay for their homes, and what these homes may be reasonably expected to cost.

No man is so wise that his estimate in such matters may be implicitly trusted in these times. If, owing to the present great difficulties in construction, the cost is greater than reasonable rents will amortize, the difference must, in one way or another, be borne by the Government and charged up to the cost of the war. We hope, however, that the cost of the whole project will be such that the householders can fairly bear it all, and eventually feel that it is their town and that they made it. We believe that, in either case, the result will be some five hundred families of more or less contented, self-respecting citizens, which would be worth the money, even if in no other way did the town prove to be a business proposition.

†Having arrived at an arrangement of streets and blocks which promised a reasonable and economical result and an opportunity for placing a maximum number of dwellings without exceeding the preferred population per acre, the type, size, and location of buildings and their effect upon lot-sizes became the primary con-

*See pages 340, 341.

†The following note was prepared for the Journal by Mr. Joannes.

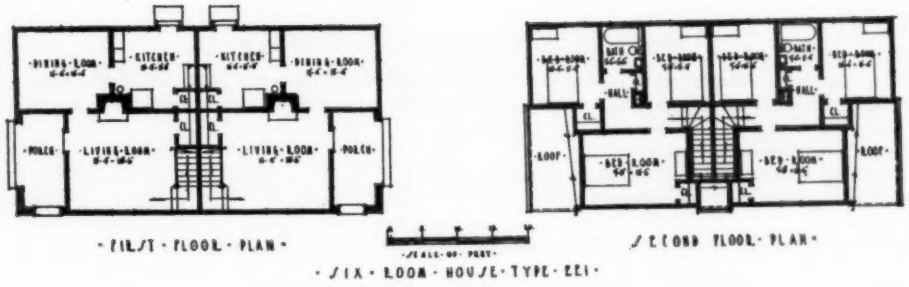


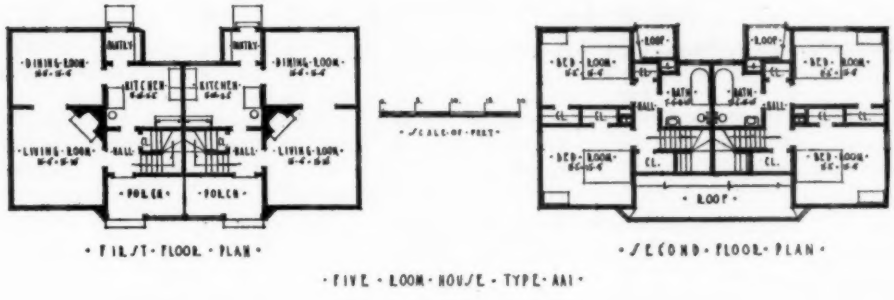
Plans and Elevation of House Row No. 2

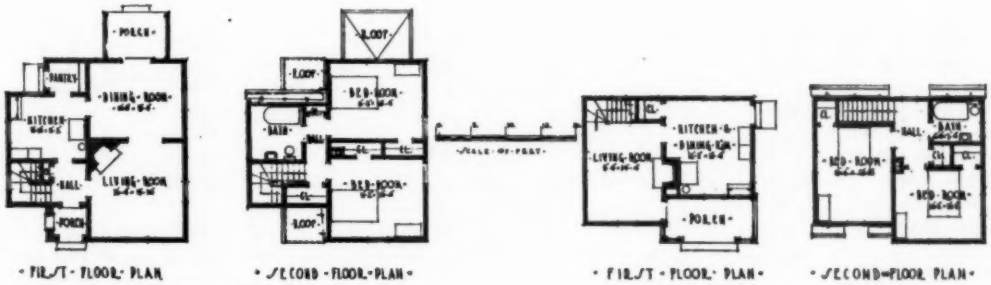
HILTON VILLAGE.—A Housing Development Near Newport News, Va., for the Newport News Shipbuilding & Dry Dock Co. Francis Y. Joannes, Architect

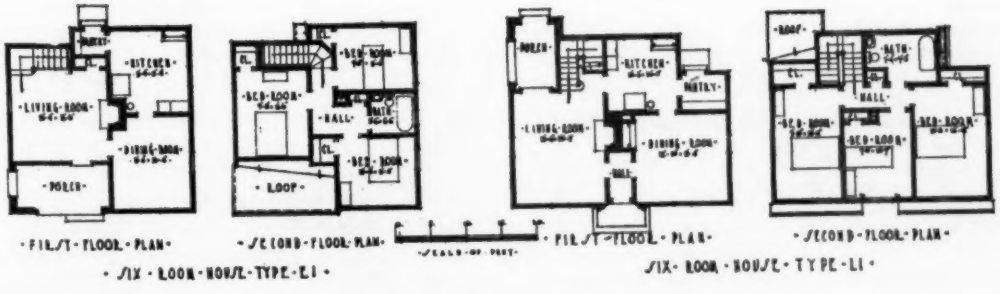
siderations. A rough schedule of quantities of four-, five-, six-, seven-, and eight-room houses was agreed upon, and preliminary sketches were made for each of these types of houses. It was deemed desirable, in order to avoid the "pill-box" effect of a large group of small houses, to introduce a certain number of two-family houses in such a way as to solidify the general appearance of the village and endeavor to break up this inevitable "pill-box" effect. In laying out the houses, the possibility of forming double houses by combining two single houses was constantly borne in mind, but a peculiar local condition, which required the placing of the chimney near the center of each dwelling, afforded an opportunity not possible in the usual housing development of combining single houses back to back as well as side to side, and some surprisingly interesting compositions resulted. This naturally afforded a means of increasing the number of types of houses without multiplying to an unreasonable degree the quantities of details and material sheets required for carrying out the work. In placing houses on the property plan it was found that the plans of practically all single houses would have to be reversed, thus creating again a number of new types.

The lot subdivisions were not completely determined until after the plans of the houses had been settled, and where crowding could not be avoided otherwise, the type of house was changed so as to maintain the established









Typical House Plans

HILTON VILLAGE.—A Housing Development Near Newport News, Va., for the Newport News Shipbuilding & Dry Dock Co.
Francis Y. Joannes, Architect

Hilton—Cost of Development Per Family

Total cost of land and development, including 5.23 acres of playfield, 6.54 acres of park, school and community building site, four church sites, extra-large main sewer for future extension, extra-large water-pipes and pump for future extension		$404,218 00
Total number of families housed, about		500
Total cost for land with all improvements* per family, about	$632 77	
Total cost of house, per family, average, estimated	2,600 00	
Total Government expenditure per family of five average, with two workers average	$3,232 77	

*Not including cost of water-supply and house-lighting, which are met by annual payments.

Hilton—Cost of Development of 500 Houses

			Total cost	Cost per house
Clearing the Ground. 20.2 acres at $300 and 50 acres at $200 00			$16,000	$32 00
Grading. 9,950 cu. yds. cut and replaced at 60			5,970	11 94
Roads.				
Broken-stone roads, 5,964 lin. ft. = 12,713 sq. yds. at 1 21			15,382	
Bituminous macadam roads 16,953 sq. yds. at 1 76			29,837	
Concrete roads 2,756 sq. yds. at 2 12			5,843	102 12
Concrete Walks.				
Sidewalks 130,350 sq. ft. = 14,484 sq. yds. at 2 18			31,574	
House walks 137,500 sq. ft. = 15,266 sq. yds. at 2 00			30,531	124 21
Curbs and Gutters (combined).				
9,368 sq. yds., concrete 6 ins. thick at $2 19	$20,515			
7,492 sq. yds., foundations 6 ins. thick at 45	3,371			
			23,886	47 72
Storm-Drains.				
4,974 lin. ft. of pipe (all sizes)	7,606			
Drain-inlet grates	928			
			8,534	17 07
Sewers and Sewage Disposal.				
Mains, total cost	18,829			
Manholes (about)	3,500			
House-drains	19,765			
Effluent to river	1,850			
Septic tank	4,860			
			48,804	97 60
Street-Lighting			5,554	11 11
House-Lighting			24,276	†48 55
Water Supply.				
Mains, 6 ins., 8 ins., 12 ins., 14,763 lin. ft.	26,535			
Valves and hydrants	2,800			
Services	16,000			
575 meters at $18	10,350			
Pumping station	7,800			
			63,485	†126 97
Plants and Planting			4,000	8 00
Professional Services, landscape architect and engineer			12,000	24 00
Cost of Land.				
Developed	78.4 acres			
Playfield	5.23 acres			
Park	6.54 acres			
	90.17 acres		78,542	157 00
Total			$404,218	$632 77

†Covered by annual payment; not included in price of lot.

HILTON—TYPICAL EARNINGS OF EMPLOYEES

Approximate Number Employed	23	15	21	203	23	346	27	209	130
CLASSIFICATION	Angle-smiths	Boiler-makers	Copper-smiths	Fitters	Moulders	Machinists includes: Brass, Iron, and Outside Machinists	Pattern-makers	Riveters (leading men) Chippers and Caulkers, Tank Testers	Ship-Carpenters
Normal hours	48 hrs.	48 hrs.	48 hrs.	48 hrs.	48 hrs.	48 hrs.	48 hrs.	48 hrs.	48 hrs.
Overtime at 1½ rate	9 hrs.	9 hrs.	9 hrs.	9 hrs.	9 hrs.	9 hrs.	9 hrs.	9 hrs.	9 hrs.
Average rate per hour for 48-hour week	$0.5186	$0.5704	$0.62	$0.4620	$0.6301	$0.5896	$0.6829	$0.5675	$0.5508
Average rate per hour for overtime	.6779	.8555	.94	.6930	.9452	.8845	1.0243	.8512	.8262
Normal 48-hour week wage	24.90	27.37	29.95	22.18	30.24	28.30	32.78	27.24	26.44
Present 57-hour week wage	30.90	35.08	38.38	28.42	38.74	36.25	42.00	34.90	33.88
Normal monthly wage	96.91	118.61	129.79	96.10	131.05	122.62	142.06	118.03	114.55
Present monthly wage	133.21	151.99	162.20	123.13	167.86	157.09	182.00	151.21	146.80
Normal yearly wage	1294.80	1423.34	1557.40	1153.15	1572.78	1471.39	1704.77	1416.48	1374.67
Present yearly wage	1658.58	1823.95	1995.55	1477.63	2014.27	1885.10	2184.00	1814.59	1761.55
Normal monthly rent	21.58	23.75	25.96	19.22	26.21	24.52	28.42	23.60	22.91
Present monthly rent	27.65	30.40	33.26	24.62	33.58	31.42	36.40	30.24	29.36
Normal yearly rent	258.96	284.66	311.62	230.63	314.56	294.28	340.96	283.25	274.90
Present yearly rent	331.72	364.79	398.26	295.52	402.85	377.02	436.80	362.92	352.37
Total normal cost (house and land) on 10 per cent basis	2589.60	2846.64	3116.16	2306.28	3145.50	2742.76	3409.56	2832.48	2748.96
Total present cost (house and land) on 10 per cent basis	3317.16	3647.88	3982.56	2965.24	4028.52	3770.16	4368.00	3629.16	3523.68
Total normal cost (house and land) on 9 per cent basis	2877.32	3162.92	3462.40	2562.40	3495.06	3269.74	3781.20	3147.19	3054.40
Total present cost (house and land) on 9 per cent basis	3685.73	4053.20	4425.07	3293.60	4476.13	4189.07	4853.33	4032.06	3915.20
Total cost of house and land on 9 per cent basis, average 5 years' present and 10 years' normal wage	3146.78	3459.68	3783.28	2802.79	3822.08	3576.18	4138.57	3442.26	3364.80
Determined cost, house and land, on 9 per cent basis, 5 per cent less	2989.45	3286.70	3594.14	2661.40	3630.98	3754.98	3918.44	3270.16	3196.56

NOTE.—These figures are not now exactly accurate (June 12, 1918) but serve to show method of calculation.

EDITOR'S NOTE.—The above figures offer a striking illustration of the domination which industry exercises over the housing problem. In many of the communities to be built by the Government it will no doubt be found impossible to build houses within the rent paying possibilities of the occupant, and it is well understood, we believe, that in such cases the Government shall bear the extra cost, or loss, represented by any shrinkage in post-war values.

But this war condition is not at all unique. As a nation, we have thoughtlessly but voluntarily accepted the principle that it is not the nation's concern when decent houses cannot be provided at a rent which is possible of payment by the occupant, and that the problem must be left to work itself out by hook or by crook.

We must change the principle, and resolutely face the problem as one in which we are more vitally concerned over the living conditions of our workmen and their wives and children than we are in the profits of industry. That is a cardinal principle of democracy.

minimum spacing of sixteen feet between houses having the same setbacks from the street.

It was practically decided at the outset that inasmuch as the country was in or adjacent to the southern lumber district, all of the houses should be of frame construction.

The exterior character of the houses was determined on a basis of permanency and upkeep, and the resulting schedule of exterior treatment shows a preponderance of stucco with a smaller percentage of houses of siding or shingles. All of the houses will have slate roofs. As the climate does not make furnace heat necessary, no cellars are excavated, but, in order to take care of wood and coal supplies and garden tools, a small outbuilding is provided for each family. In order, again, to avoid the dotting of the landscape with what might appear to be small dog-houses, these are combined, wherever they can be, in twos, threes, and fours, thereby improving the general appearance with a resulting economy in construction. These outbuildings are made large enough to house a small automobile.

The contractor for the construction work was selected early, and a sufficient number of estimates were made of the cost of the various types of houses. By comparing the total costs with the wage schedule of the prospective tenants it was found that the range of rents or sale prices was safely within the amounts which the different types of skilled labor could afford. To make an adequate provision, however, for the low-priced, white, semi-skilled mechanic or young apprentice, married, but with few or no children, it was therefore determined to place a row or terrace type of house along the Warwick County road, which is an improved thoroughfare probably less desirable for the better type of development. These row houses are four rooms each, a combination kitchen and dining-room being provided. The end houses of each row are, however, five- and six-room houses, affording a better architectural termination and a further variation in accommodation. This accomplished a further result of again solidifying the appearance of the village, particularly in its aspect to one passing through the village by way of Warwick County road. At the Village Green or Square there are allotments for twenty stores having small apartments in the second story. Provision is also made in the store groups for a moving-picture theatre, billiard-hall and bowling-alley, and a hall for lodge meetings, religious meetings, theatricals, and other community activities. Four lots have been set aside for churches, and these will be assigned to the denominations who may require them, the financing and building of these being left largely to the community. Provision is made for a grade school which has combined with it a meeting-room, gymnasium, domestic-science room, and other community features.

Because of the fact that the major part of the passenger transportation will be furnished by the extension of the Newport News trolley service, nothing more than a substantial shelter will be constructed for the railway station in connection with the Booster Station for water service until such time as traffic demands develop.

In preparing working drawings and details it was determined to place all of the plans and elevations of each type of house on one sheet, and all of the details in connection with each type on single sheets, so that a foreman could be given a single sheet containing all the information he required to construct the house and not be hampered by the loss of single plans or elevations from "sets" of prints prepared in the usual way. A single specification covers the work on all dwellings. The dimensions of all dwellings are based on market sizes of framing lumber, the story heights being established on the basis of 16-foot studs cut 8 feet 5 inches and 7 feet 7 inches. This cut of studding would not have been an economical one except for a wholesale operation such as this. The contractor has practically established a "pre-cut" house proposition on the site, all joists, studding and framing being cut to lengths properly piled and issued as required in accordance with material schedules for each house. The bulk of the material has been ordered by the Construction Division of the Army on bills of materials furnished by the contractor. For certain items orders have been placed directly by the owners as agents of the United States. Considerable saving has resulted, and the delivery of materials has been greatly expedited.

Preliminary drawings and studies were begun on December 24, and actual construction work began early in May. All matters pertaining to design were supervised until the middle of April

On Warwick County Road, Showing H¹ House and Row No. 8

HILTON VILLAGE.—A Housing Development Near Newport News, Va., for the Newport News Shipbuilding & Dry Dock Co. Francis Y. Joannes, Architect

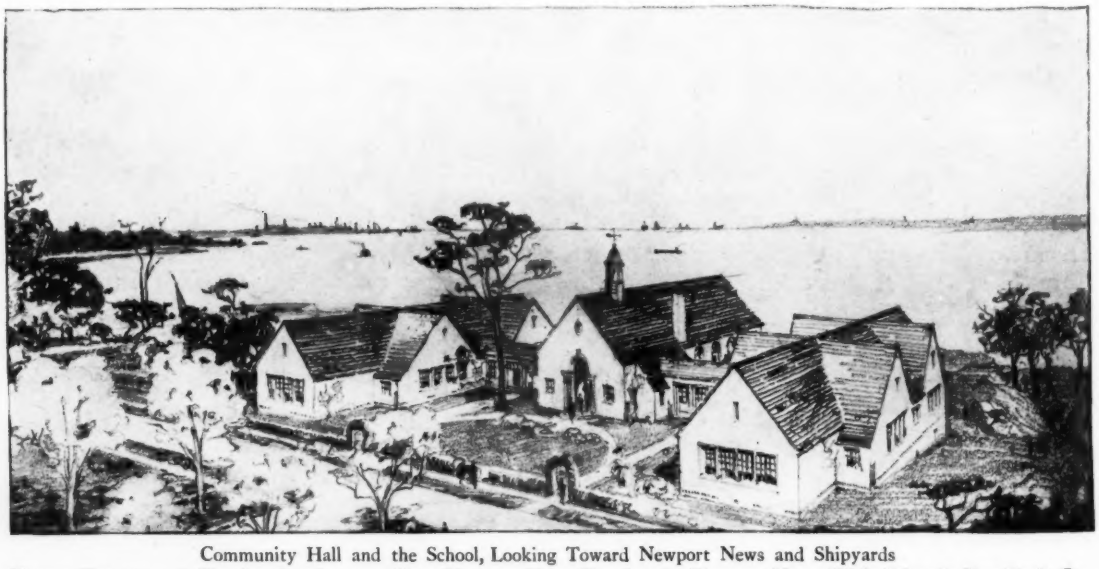
by the Committee on Industrial Housing, Council of National Defense (afterward the Housing Bureau, Department of Labor). Since that time the supervision for the Government has been cared for by the Housing Division of the United States Shipping Board. Thus the development has been through the organization stages of two Government bureaus.

Apartments

Another development which is also under construction consists of four apartment buildings, four stories high, of the open-stair tenement type, each building containing eighty-four apartments of two, three and four rooms each. These are being erected within the city limits, near the shipyard, and form a very important adjunct to the village development in that they provide immediate quarters for new workers who might not be able to take a house and furnish it before knowing that they were going to remain. A place is also provided for the young married mechanic who can set up housekeeping in two or three rooms and later, when his family grows, he will naturally gravitate to the village for larger quarters and surroundings. Floaters are also taken care of, and, as rents are to be collected weekly, not more than a week's rent should be lost. These buildings will contain a general store, drug-store, kindergarten, restaurant, men's club, and possibly a branch bank and branch library.

Corner of Park Court

HILTON VILLAGE.—A Housing Development Near Newport News, Va., for the Newport News Shipbuilding & Dry Dock Co. Francis Y. Joannes, Architect.



Community Hall and the School, Looking Toward Newport News and Shipyards

HILTON VILLAGE.—A Housing Development Near Newport News, Va., for the Newport News Shipbuilding & Dry Dock Co. Francis Y. Joannes, Architect.

On the Site of Hilton Village, May 6, 1918

On the Site of Hilton Village, June 13, 1918

Croix Miloinaux (Somme).—The Temporary Bakery of the American Red Cross

Grecourt (Somme).—Dispensary of the American Women's Cantonment

BETHANCOURT (Oise).—The Mayor's House. Entirely Restored by the Baronne de Brincard and the French Government

BLÉRIANCOURT (Aisne).—Miss Anne Morgan's Farm

MATIGNY (Somme).—House Reconstructed by the American Red Cross

MATIGNY (Somme).—Buildings Restored by the American Red Cross

VITRIMONT (Meurthe-et Moselle).—Village Reconstructed by the American Red Cross

GRUNY (Somme).—House Reconstructed

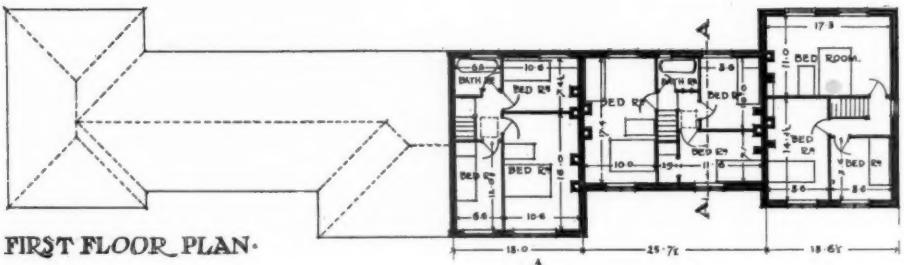
GRUNY (Somme).—American Red Cross Volunteers Reconstructing a House

CROIX-MOLIGNAUX (Somme).—Barracks of the American Red Cross

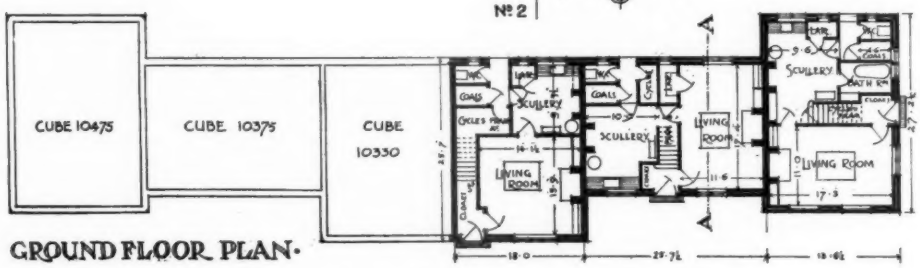
LASSIGNY (Oise).—Buildings of the Village Reconstruction Work

BETHANCOURT (Oise).—House Reconstructed by the Baronne de Brincard and the French Government

FRONT ELEVATION.



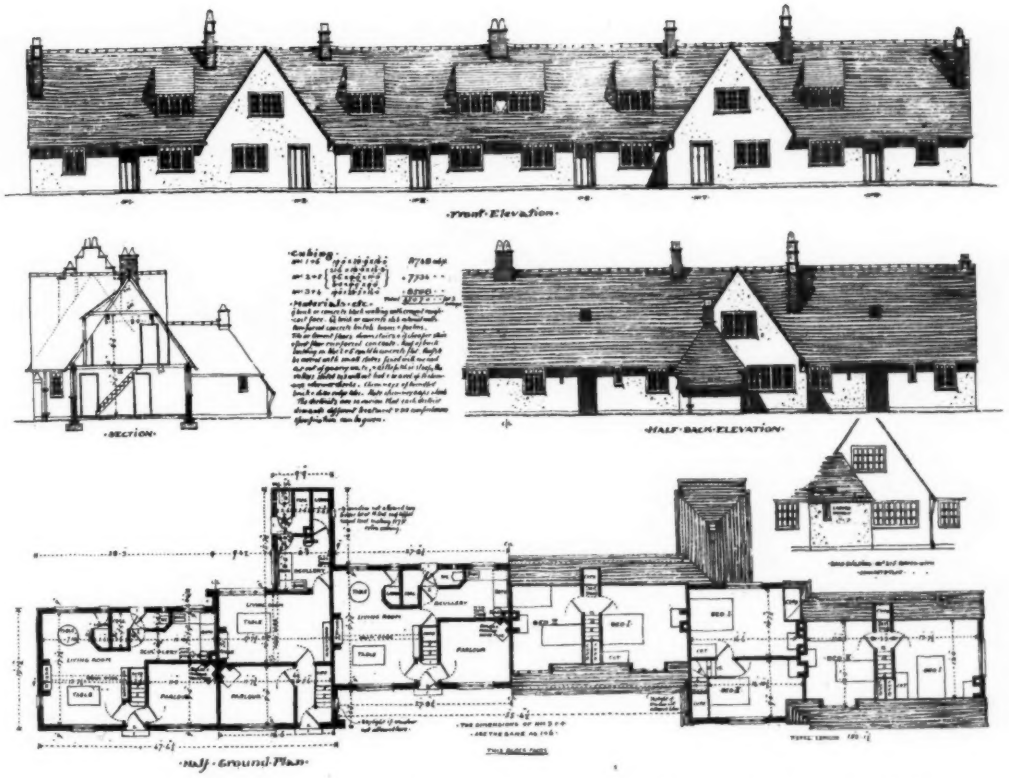
FIRST FLOOR PLAN.



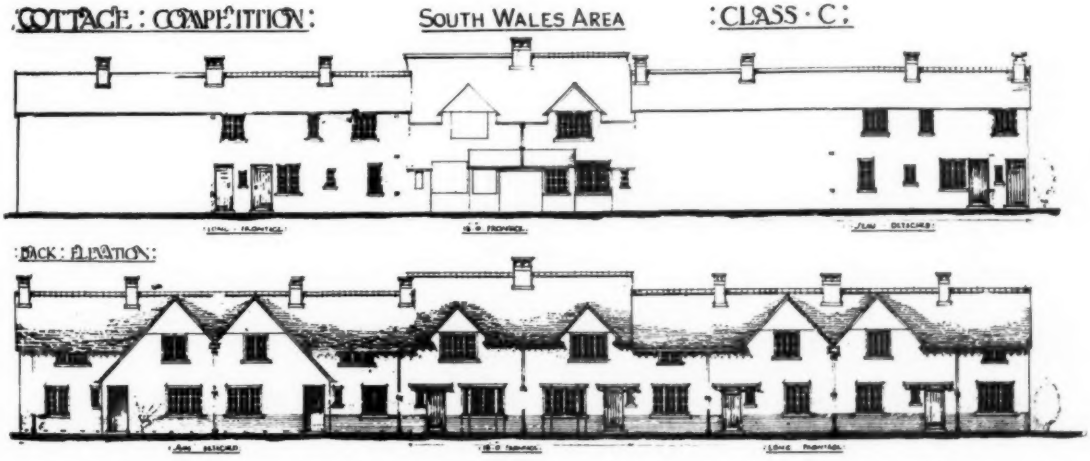
GROUND FLOOR PLAN.

Home Counties Area. Class A, First Premium. Courteney M. Crickmer, Architect. London

Cottage Competition of the Royal Institute of British Architects

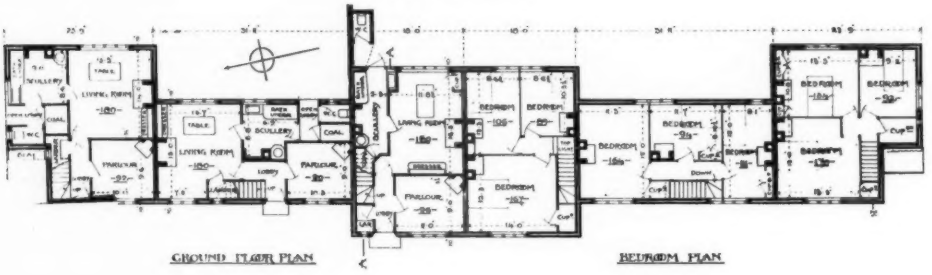


Manchester and Liverpool Area. Class C, Second Premium. H. L. North, Architect. Llanfairfechan



South Wales Area. Class C, First Premium. Johnson & Richards, Architect. Merthyr Tydfil

FRONT ELEVATION

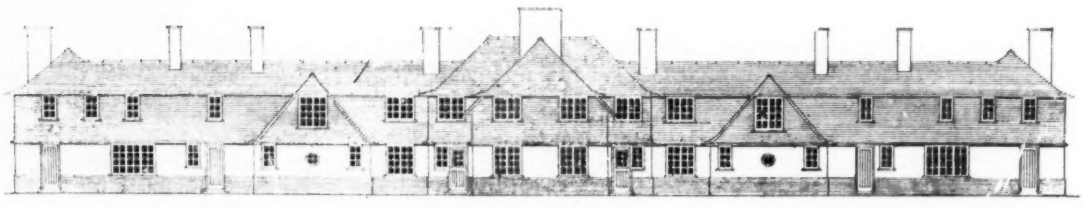


GROUND FLOOR PLAN

BEDROOM PLAN

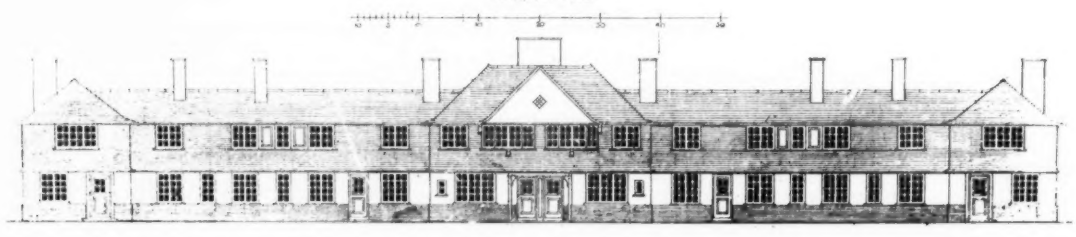
BACK ELEVATION

Southwest Area. Class B, Second Premium. H. Heathman, Architect. Bristol



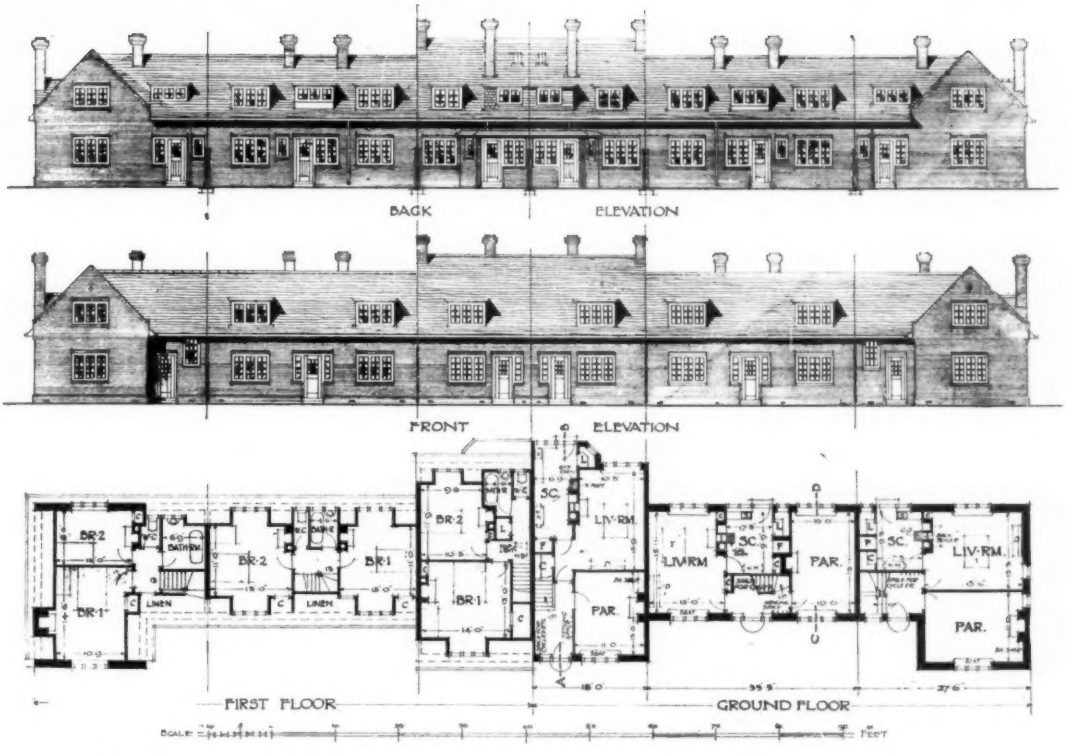
BACK ELEVATION

SCALE 8 FEET TO 1 INCH

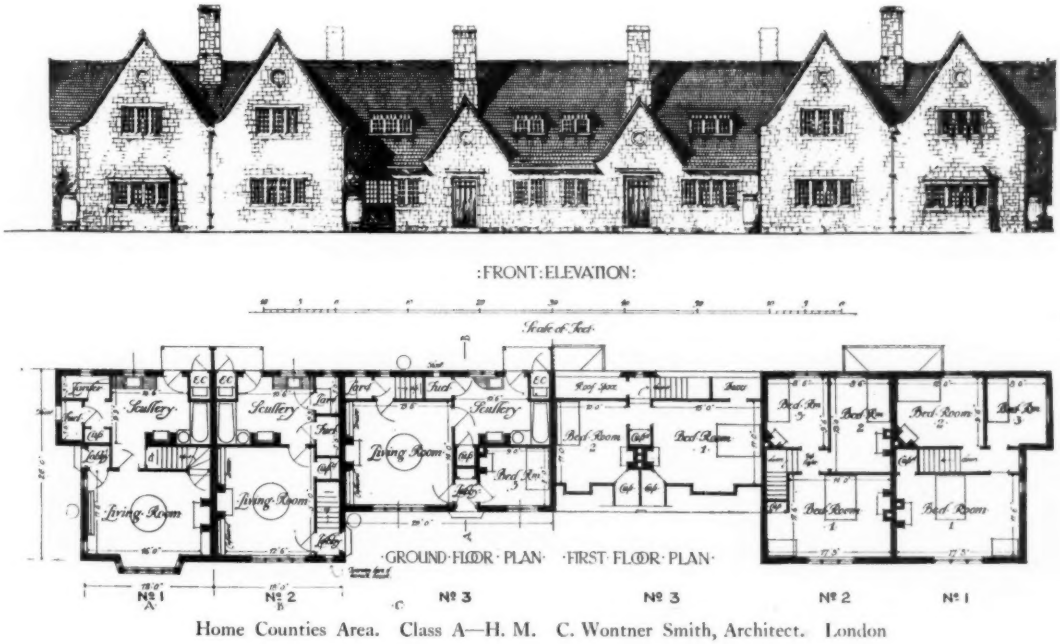


FRONT ELEVATION

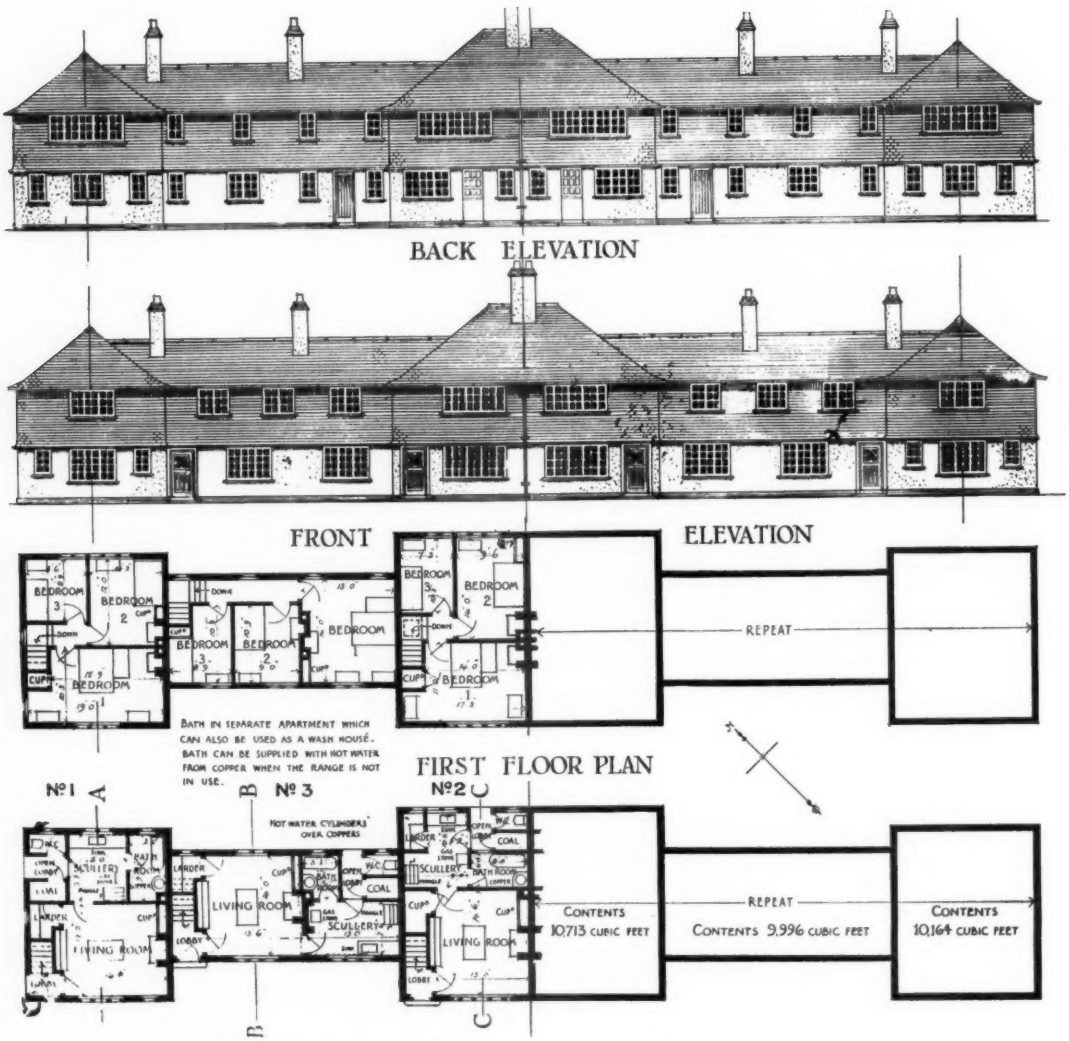
Southwest Area. Class B, First Premium. H. L. Thornley & Rooke, Architects. Plymouth



Northern Area. Class C, First Premium. Knowles, Oliver & Leeson, Architects. Newcastle-on-Tyne

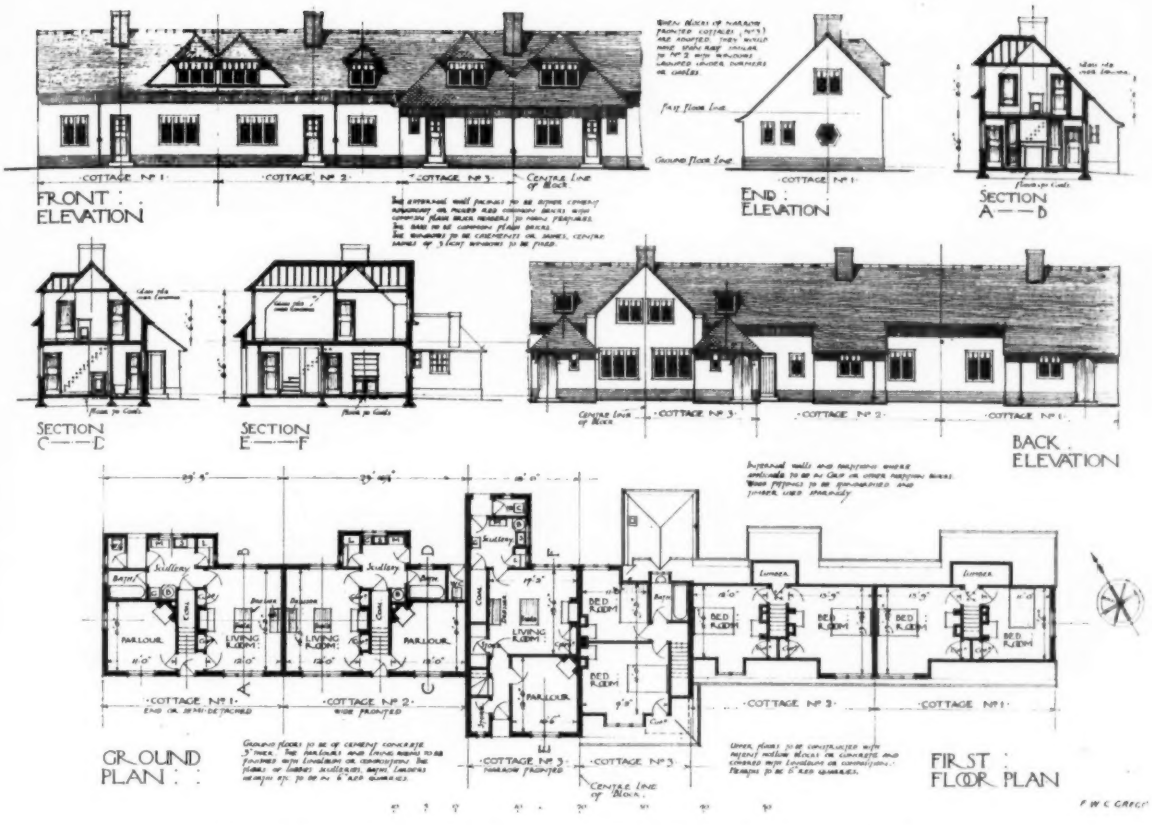


Home Counties Area. Class A—H. M. C. Wontner Smith, Architect. London

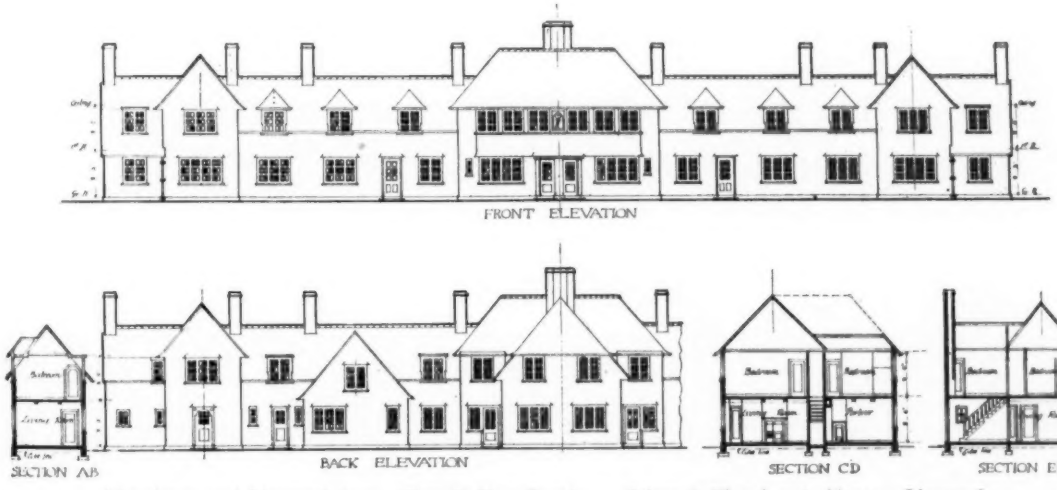


Southwest Area. Class A, First £100. Thornley & Rooke, Architects. Plymouth

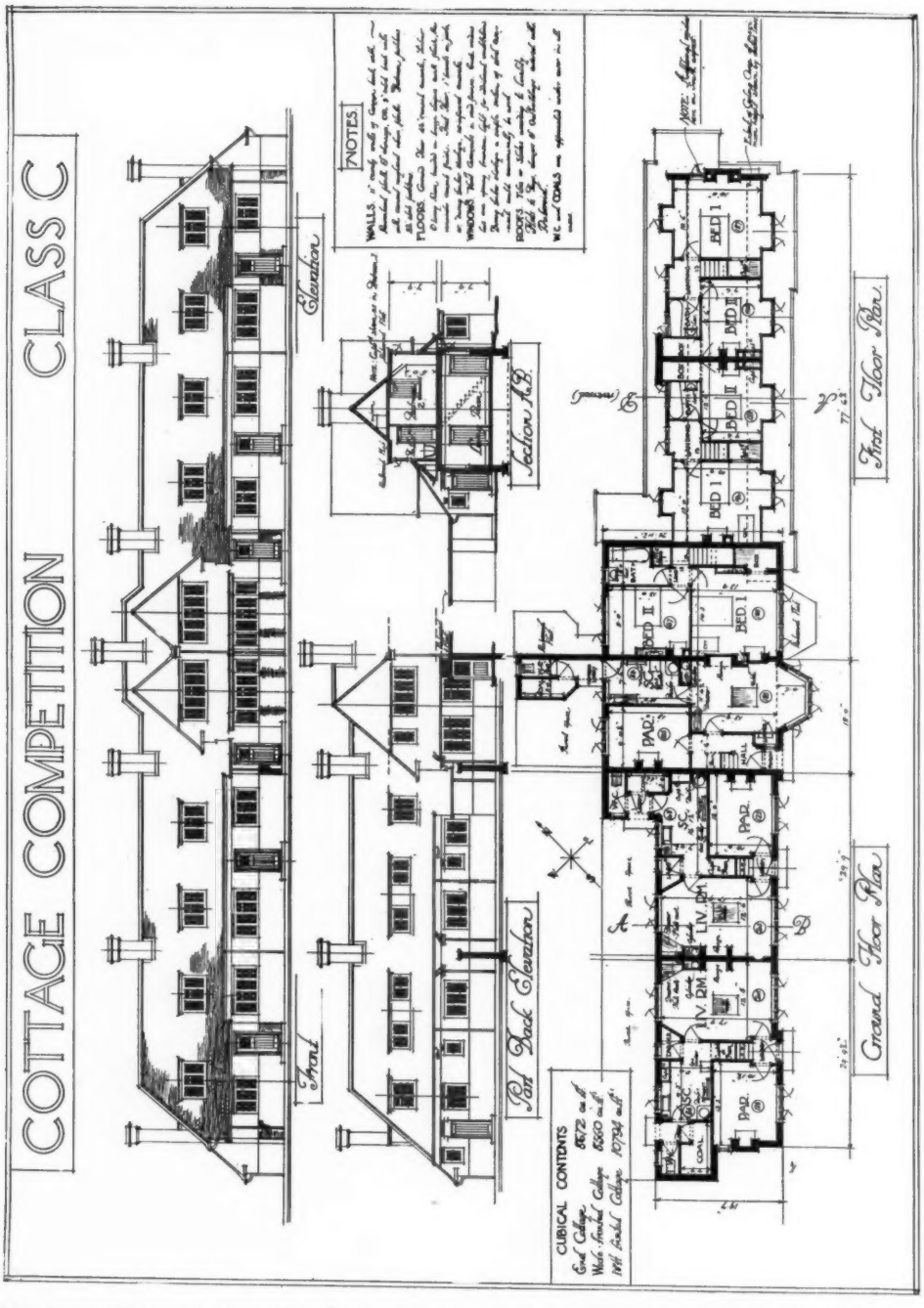
COTTAGE COMPETITION OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS



Midland Area. Class C, First Premium. F. W. C. Gregory, Architect. Nottingham



Manchester and Liverpool Area. Class B, First Premium. Briggs & Thornley, Architects. Liverpool



Manchester and Liverpool Area. Class C, First Premium. Halliday, Patterson & Agate, Architects. Manchester

Architecture After the War

In connection with the survey which the Institute now has under consideration and which will embrace a consideration of the relation of architecture in all its forms to Democracy, we reprint the following discussion from the Journal of the R. I. B. A. England has her problems, too, and they do not essentially differ from our own. A part of this discussion was published in the Journal for October, 1917.

Mr. Halsey Ricardo [*F.*]: I think we are liable, every now and then, not to take into account the importance of general feeling, and are inclined to suppose that the great men who periodically appear are pioneers, leaders, and makers of things. Take the revival of Gothic architecture, which was a very great thing of its kind. We are inclined to associate it with the personal work of men like Pugin and Butterfield and Street, forgetting that those men were really the index of a very strong feeling that backed them up. Without that immense popular force behind them, theirs would have been merely sporadic individual efforts and would not have had anything like the effect we know they did have. The same sort of force of public feeling affected the Pre-Raphaelites, and affected the poetry of the time. One talks of Ruskin and Madox Brown, of Rossetti, Morris, and so on, but what gave them their power was the great feeling that was behind them, which may be interpreted as a protest against the eighteenth-century quietism. What was natural in those days was that the people, dissatisfied with the spirit of their time, should be looking for some jumping-off place, some place from which they might rise to more passionate heights and proceed. The unfortunate thing was that they kept their eyes turned so severely backward that when they got to the platform, or jumping-off place, no one jumped off: it became a question of correctness and of academic knowledge, of archæology, and things like that. And so we sank back into another form of quietism, that is to say, a certain complacent acceptance of things as they were, a state of mind in which it was supposed that matters would go on well enough, provided they were given sufficient time. I remember, many years ago, talking to Professor Lethaby and saying I thought what would be good for us would be to be shocked out of this feeling of smug contentment, that it was of no use for us to hope that Afghans, or other people of that ilk, would invade us, and therefore the best thing would be to put a revolver in the hand of every lunatic there was in the asylums and turn them into the streets with instructions to fire off the whole of their ammunition at all and sundry. Well, that is the sort of thing that has happened. We are now under a condition of things which will bring about—I was going to say our having a clean slate, though that is not quite what I mean. But as to our future, we all realise that we must hold together, that there must be more communal feeling, there must be less satisfaction with individual things. And so, with this in view, we come to the question of education. And what I would like to see, if it could be done, would be for the Institute to memorialise the Minister of Education, on the ground that he has now got the chance given by a clean slate of seeing that everywhere there shall be a great teaching of the virtue of citizenship. That is what made Athens great, geographically a paltry place with no natural advantages, and it has remained great in our estimation ever since. The sense of citizenship is what has also made other places famous.

And, besides direct education in citizenship, I would like it also represented to the Minister, as part of the education of a citizen, that one of the characteristics of architecture that can be taught in the schools is that of orderliness, which at present we have rather lost sight of. Of course, there is the danger about insisting upon definite orderliness, seeing that architecture, being a living art, must develop and must progress; and there is a sort of order, charming in its way, which might be described as crystalline order, a final sort of order. Things may be very orderly, like the forming of a crystal, but when once formed there is no progression. On the other hand, there is the orderliness of growth, like that of the growing oak or the beech tree. We have to deal with an art which is vital, one full of life and of growth, an architecture suitable for towns which are full of life and growth and development. But we still want to keep to orderliness, which at present we have not got.

And one way of educing that, I think, would be also by representing to the Minister of Education that the teaching crafts in the schools would help a great deal in that way: that when you work with your hands you discover the conditions of cleanliness, of accuracy, and of finish: you also discover that there is a kind of finality to good work. You discover that the drudgery of it is pleasant, instead of being unpleasant, as much education is. And there is so much less to unlearn: much which you do is good for all time. And then you have an appreciation of what is not good work, as well.

Another point that I want to put before you has nothing to do with the Minister of Education. I think we do not sufficiently recognise the part that women have played in architecture. I put it in this way. If I remember rightly, Mr. Dunn said that the thing we have done of late most successfully has been our house, particularly our country-house, architecture, especially in regard to the interior arrangements of the house, and I think that is due to the fact that women have insisted on having their say in the matter. It has been very inconvenient and disturbing to our architectural omniscience, but it has produced a result that I think we can pride ourselves upon. And if that kind of coöperation can be extended it will make our streets and towns more decent and orderly. . . . . .

We are so bourgeois in outlook, so respectable and correct in attitude, that it is hardly considered the thing to concern ourselves with architecture in relation to the sense of order, economy, and fitness and the many other qualities, values, and activities which form the basis of civilisation—architecture and political economy, in fact.

Professor Lethaby's Paper was to a considerable extent a discussion of misbehaviour and bad manners. Now it is against this background of bad manners, this disorderly

and inept type of life, that architecture is silhouetted, and indeed the whole of the things we have been discussing at these conferences. This is disconcerting in that it makes so difficult architectural education and the other schemes in which we are interested. However admirable may be our schemes of architectural education, however pious the resolutions which we may pass in this room, they will always remain schemes or ideas working in a vacuum unless they coincide fairly with the sense of values of the nation at large.

Ateliers and schools, to be really effective, must reflect the sense of values of the layman and not the reverse. If the former obtain, you have architecture growing naturally out of the life of the times; if the latter, you have a priesthood imposing upon the people a mystery they cannot understand. The late Mr. March Phillipps tried his best to get the Englishman to realise in his heart, not merely to assent with his mind, that the architecture of a civilisation was one of the most valid pieces of evidence whereby the spiritual and intellectual attainments of that civilisation could be measured. We are getting exactly the type of architecture we deserve or can understand, a type at once ineffective yet dominant, incoherent yet expressive, virulent yet banal, subservient to prescription and yet anarchic. It is difficult, however, for us to get away from our sentimental middle-class notions that the modern English home, the modern English factory, is a model for all the world. In stark reality the vast majority of English homes and factories, built, say, within the last ten years, are our disgrace.

Mr. H. V. Lanchester [*F.*]: May it not be suggested that the entire attitude of the architectural profession as represented by the professional societies in relation both to the public and to architects is in need of drastic revision, and that the present moment, when ideas are in the melting-pot, is a suitable time to effect a change in this respect? The claim that this is the moment to forward any proposition for a reorganisation of our professional activities is reinforced by the fact that most of our younger men are in the Forces, and that it is the duty of those who are not to see that on their return to the ranks of the profession every practicable opening is made for them to take up their work again. With this in view it will surely be best that those who have not a definite position to which to return should be placed with special regard to their faculties, present and potential. It is not for us to look at their claims in a narrow spirit. After all, they represent nearly half the effectives of our profession during the coming decades. However, this is only one aspect of our problem, and one that, though it looms largely at the moment, is none the less subservient to the main argument in favour of an effort to raise the efficiency of the profession as a whole. Taking first the position of architects towards the public. Our most important duty is to endeavour to ensure that the nation secures the best architecture possible. We are not exonerated from this duty by the fact that the public is incapable of securing this by its own efforts. To commence with, if we as a body took a greater interest in the problems linked up with our special sphere of activity, such as social and educational questions, these sympathies would bring us in return a clearer appreciation of our own work. Again, may it not be possible to offer the public a more easy road by which to obtain a higher standard of design in buildings of all classes? Is it going too far to say that to the artist and inventor a fully occupied life is worth far more than the amassing of surplus wealth which can only be utilised in buying inferior recreation? The appreciation of this fact frees us from the obsession that we need to receive more than a reasonable competence from our efforts, as even then our life is a fuller one than that of those less happily occupied. Once convinced of this, we are at liberty to organise our energies in such a manner as will best lead to fine architecture, and to eliminate factors discouraging this.

Before carrying my argument further, may I demand your acceptance as an axiom the assertion that everyone enjoys best the type of work in which he is most skilful; and the further one, that the field covered by the practice of architecture is so broad that a greater degree of specialisation is admissible? These views have been widely accepted in the United States, where the large offices include men of varied types of qualification. I think it may be claimed that architecture has been the gainer; and, though we may not wish to organise exactly on these lines, it will be well to bear in mind the fact that by this means those whose capacities differ are working much more efficiently than by our individualistic system. It will probably be felt that the genius of our own country is not quite in harmony with these large organisations, but is it not possible to secure some of the advantages without such a pronounced sacrifice of personal initiative?

The aim I have in mind is that more of our buildings should show the hand of the genuine architect rather than that of one to whom even the achievement of some simulation of the real thing is a laborious effort. We have in our ranks men of highly developed artistic faculties who under our individualistic system devote but a tithe of their time to the exercise of these. We have sound and ingenious planners and constructors who are called upon to go outside their own sphere to an almost equal extent. We have those whose skill lies in the tactful handling of difficulties; those who are specially capable as business organisers in respect to building work; indeed, it is not possible to classify all the shades of ability and temperament.

It would be waste of time to recite the various haphazard expedients now employed as correctives. You can all depict them for yourselves, and are probably fully aware of the extent to which they fail in respect to our avowed aim of securing the best architecture we can conceive of as possible. We can see the reasons why they fail, and know that not the least of these is the limited outlook we ourselves have taken in regard to our practice of our profession. Is it not time, amid the general revision of ideals, to consider whether we cannot broaden this outlook and discover a means of reorganising architectural work on lines conducive to better architecture and increased general efficiency? Whatever we may be able to do for the future by improved methods of education and other measures, the fact remains that the profession offers employment for more than the number we can hope to find gifted with the faculty of architectural expression, and the problem will remain of getting the best possible output from the limited number so gifted. The French Government attempts this by the preferential treatment it accords to the selected

class of architects "diplômés," but we are hardly likely to get much immediate help from our own Government, already overburdened with more general problems. Our clients, the public, are not in a position to appreciate the difficulties. If anything is to be done we must do it for ourselves—but how? That is the question before us.

Now, assuming that we have the best will in the world with regard to coöperating with our professional brethren, it is not easy to see how such coöperation is to be effective, even with the most altruistic intentions, except by means of a professional society. Such a society must do more, in two ways at least, than has been customary hitherto. First, it must find a way to secure closer personal contact between all its members; secondly, it must see that special qualities exhibited by any of its members receive adequate recognition and opportunity. Take our own Institute. I think it is quite wrong that any member should be allowed to ignore its existence from the day he joins to that on which he dies or retires. There are so many things that we might do but don't, that everyone ought to take a share in the work appropriate to the stages of his career. From the moment of entry as a student there should be someone at hand from whom advice and help may be sought; and such relationships should continue. It would be much easier to influence public bodies, and even other prospective employers of architects, if the Institute were recognised as devoting its chief interest to the advancement of the standard of architectural achievement without suspicion of professional bias or aggrandisement. We have already gone some way in justifying this claim, though but a short distance compared with that to be covered if we are to earn the confidence of the public that when it places itself in our hands as an adviser we as a body will act unreservedly in the interests of the community in respect to architecture, and will treat our own members as an organisation to be utilised, in groups or individually, in exactly the way by which the public interest will best be served, and in no other.

There are societies in existence which have been formed to do the work that we should be doing. The London Society, the National Housing Society, the Garden Cities Association, are all doing work that it is the proper function of this Institute to do. We have ignored it, and other people have taken it up. The consequence is that they are in touch with the vital forces in the country, while we seem to be sitting in the clouds.

Mr. H. M. Fletcher [*F.*]: I would like to support very strongly what Mr. Ricardo said about education. It seems logical that the discussion at the last meeting should have tended more and more, as it went on, toward the subject of education, because without education there is no continuity, and without continuity there is no civilisation. We should also support Mr. Weir's contention, that the education of most importance to us is elementary education. And I would like to add that the faculty which most needs training in our education, because it is the one which, generally, has been most grievously neglected, is the eye. There are so few Englishmen who really see anything. I have been in the habit at various times of going for country walks with a body of men, of whom several are civil servants, who, I suppose, represent the top of the present system of education. They are all of them "sand-blind, high-gravel-blind": they walk about the country without seeing anything at all: their eyes are covered with a horny substance. If one started with young children, training their eyes merely to look at things and think about the impressions produced, the whole attitude and outlook of the people we have to build for would be entirely different. Everybody in this room has come across the man who says "he wants his house made comfortable inside; he does not care what the outside looks like." It is the most humiliating confession a man can make. He ought to be hurt and injured by things that affront his eyes, but he "does not care." If you point out to him that as well as sitting inside his house he probably spends a good deal of his time in his garden looking at his house, the statement generally comes to him as an entire revelation. Often he thinks there is something in it, but it has not occurred to him before. He is not to blame for that, because he has never been properly taught the use of his eyes. I think you will find that that is a specially English fault. If you talk to a French layman, or to most foreigners, or to Americans, you will find they can meet you more or less on your own ground: they have ideas in common with those of architects. In America it is striking how much architecture is a subject of ordinary conversation: quite intelligent people there know the names of the most prominent architects! That has been largely due to the sort of spade-work that McKim did, which was on the lines which Mr. Lanchester and others have suggested. The American Institute of Architects is known as a force to be reckoned with. I believe that when McKim was President he got together all the most important men whom he knew—and he knew most of the men who count in America—and forced the Institute upon them. And we want some strong man, or some strong body of men, to do the same thing here, because, as Mr. Ricardo said, we cannot work in an environment which is entirely ignorant of and unsympathetic towards the ideas which we are working out: it is like swimming in jelly.

Mr. John Cash [*F.*]: What I feel is, that architects are not in touch with the public, and they certainly are not in touch with the Press as they ought to be. You hardly ever see architecture mentioned in the ordinary everyday Press, the daily or the weekly journals. Can we get into touch with the public in that direction? Can we ask the Minister of Education to put architecture forward as a study for the scholars, even in the elementary schools? The history of architecture is almost as exciting as the history of fighting, of battleships and things of that kind. It might be made very interesting if the Institute would take upon itself to suggest subjects for reading-books. Perhaps some of our members could become authors. Professor Lethaby, for instance, would be an admirable author of juvenile literature dealing with the subject. We might help the Minister of Education in that way, and he, in turn, might help us. There will be no outlook for architecture in England until we have made democracy interested in it as a subject. It has been well said today that times have changed, and the eighteenth-century manner of government has gone, and that we are now approaching something like democracy. The people are to be our future masters, and we have to get their ear. And the only way to do that is through the elementary schools and through the

public Press. I feel we ought to do a great deal of good by continuing along the lines which have been started at these conferences: there will be very little done unless something of the sort is undertaken.

MR. LANCHESTER: A man not a member of the profession said to me recently: "You architects are doing very little for your partners in the profession of building. You don't care how the men live who carry out your work." I think that might be a very good subject: to see if we can get out a programme that will enable us to do more.

MR. SIDNEY GREENSLADE [*A.*]: It is sad, when you get a clever foreman mason, plumber, fixer, and so on, that they are allowed to drift away from the building on which they have been engaged without a word of thanks. In days gone by, I believe, they were given a dinner, and the clerk of works had a present from the foreman. I have seen men who have been engaged on a building for five years simply allowed to drift away afterward without a word of thanks. It seems a most distressing thing.

The following is the text of the resolutions as submitted to the Council:

Resolution No. 1.—The Conference wishes to suggest to the Council of the R. I. B. A. that the time has come when matters of public architecture should be their main concern, especially at the evening meetings and in education. It is desirable that a constructive policy for bettering all our towns be considered, as well as national housing and such questions. In promoting a policy of public usefulness the Institute might best find the way to its own proper development and status.

Resolution No. 2.—That the Institute should represent to the Minister of Education the importance of insisting, in all the universities and schools under his charge, on education in the duties of citizenship in relation to the amenities of our towns and cities, and the value of manual instruction in mental development.

Resolution No. 3.—That the Council of the R. I. B. A. should consider the possibility of developing its organisation on lines tending to bring members of the Institute into closer touch with each other and with all technical associations and those engaged on a constructive public policy.

Of these three resolutions the first was based on the Paper contributed bv Professor Lethaby, the second on Mr. Halsey Ricardo's remarks, and the third on Mr. Lanchester's; and the Council appointed these three gentlemen as a subcommittee to draw up a memorial to be sent to the Minister of Education, as suggested in Resolution No. 2. The draft memorial was submitted to the Council and, after slight amendment, was passed in the following form and sent to the President of the Board of Education.

MEMORIAL.

To the President of the Board of Education:

The Royal Institute of British Architects as a body examining candidates for admission to membership holds Intermediate and Final Examinations and admits students to the examinations who have qualified in various ways. This preliminary qualification is of the broadest possible character, but it is felt from experience gained in these examinations that the type of general education leading up to architecture and other related callings might be very greatly improved, if it is to develop on the best lines the mental outlook demanded by all those who may be engaged in the building industries. Moreover, apart from this particular aspect, there is the wider question of the national attitude toward corporate life and the demands of civilisation. In these respects the provisions we would ask for in education would be of no less value generally than as preparatory to the exercise of the large group of callings having to do with building.

The Royal Institute of British Architects, with these objects in view, welcomes—as of the highest importance—the policy of the Board of Education (as defined in the Code of Regulations, 1912) to encourage the natural activities of eye and hand by instruction in the public and other elementary and secondary schools. It desires to emphasise the recognition that provision should be made for:

1. Training in the perception of the forms of things and in the principles of structure (natural and devised).

Drawing is not merely a matter of skill or of expression, but also a valuable means of observation during the exercise.

All must be taught to draw, and in doing so should practise on decorative and constructive subjects, fine lettering, typical forms of foliage, beasts, etc. Of late years there has been a tendency to get rid of "copies" under the idea that drawing was mainly an exercise to acquire skill in making portraits of objects in the round.

2. Practical manual work, which is of great importance for the development of all (and in many cases almost the only opening to) understanding. This form of education not only offers the pleasure of definite achievement but enables the worker to appreciate the value of good work in general. It is also beneficial in providing a form of exercise, mental and physical, in which the pupil can detect his own errors.

3. Teaching leading to a comprehension of common duties in relation to cleanliness and order in house and school, the streets, gardens, etc.

4. Some knowledge of the history, buildings, and general arrangement of the town and neighborhood in which the children live, and of memorable citizens; a town spirit being probably the best basis on which to build up a national spirit.

5. Some exercises in the arrangement of simple material which might bring out the idea of design and strengthen initiative.

HENRY T. HARE, *President.*
H. V. LANCHESTER, } *Members of*
ARTHUR KEEN, } *Council.*
E. GUY DAWBER, *Hon. Secretary.*

A letter from the Board of Education has since stated that the views of the Royal Institute of British Architects will receive the careful consideration of the President of the Board.

Transportation or Housing

TRANSPORTATION instead of housing has been suggested in many localities as the solution of the difficulty of our shipbuilding concerns in getting and holding workers. It is not surprising that in the case of the Newark Bay yards this should have seemed the logical way out; on the small-scale maps, on which apparently are solved the Nation's problems of labor-supply, the Newark Bay yards are very near to New York. And is not New York the "greatest labor market" in the country? So a *transit expert* was chosen to solve the housing problem of Newark and its neighborhood.

According to the newspaper reports, the Shipping Board's transit expert "has in thirty-four days since beginning work investigated and planned transportation for the workers in twenty-eight shipyards on the Atlantic Coast." He proposes to lengthen the line of the Hudson tubes so the workers may be carried directly from two of the yards to the stations of the tube between Cortlandt and 34th Streets in New York.

A thorough investigation was made last spring for the City Club of New York of the region within a reasonable walking distance of these stations. It was found that there were practically no accommodations available which would satisfy married skilled workers. According to the report:

"Both the Chelsea and Greenwich sections have been extremely slow in developing the modern type of small flat or apartment, such as this class of workmen require. The few new buildings which have been constructed in recent years are tenanted fully as soon as completed, and any vacancies which occur are eagerly snapped up. It is the unanimous report of all real estate agents, confirmed by personal investigation, that there are no vacancies in houses of this type, nor is there any likelihood of any occurring in the future."

Cheaper tenements that might satisfy unskilled laborers with families were found but in small numbers and only in the most undesirable sections.

"These houses are of the 'Old Law' type, dark and poorly kept. The majority are 'cold-water' flats, although a few have hot-water supply. Steam heat is not to be found except in rare instances. These flats rent for from $4 to $4.50 per month per room and do not constitute adequate living quarters for men engaged in industrial work."

A few slightly better than these were found in the region around 26th and 31st Streets, but even these were anything but desirable, and most of the vacancies were some distance from the entrances to the tube.

It was found that accommodations for some 1,500 to 2,000 single men might be secured by crowding in the furnished-room houses of this section. But it is a well-known fact that though married men may be induced to travel some distance to their work, it is practically impossible, in these days, to hold an unmarried worker for any length of time unless he is housed near his work. After considering the possibility of using certain public or semi-public buildings as barracks, the investigation finds:

"In conclusion, it seems clear that no accommodations can be expected for the skilled man with his family, that there are accommodations of doubtful nature for about 250 to 350 laborers with their families, and that for the single man, both skilled and unskilled, relying on every source there should be accommodations for about 5,000 to 6,500 persons. It should be realized that the locations of these men will be widely scattered over the districts and that difficulty will be experienced in retaining the personnel intact on account of the many outside diversions, and also that the living quarters, in most instances, will lack the features of modernity and cleanliness which is essential in maintaining the workers at the highest point of effectiveness."

As the increase of workers between January and July of the Newark shipping plants was calculated as 17,000, it hardly seems that the transit expert of the Shipping Board had proved himself to be, at the same time, a housing expert. But if he should prove to have solved the problem of Newark's housing, who is going to find a way out for New York with its ever-increasing war industries and its building of tenements at a standstill?

June 26, 1918. CLARENCE S. STEIN.

News Notes

The Usefulness of Regional Surveys

The survey of the Philadelphia district, and the report prepared by the committee of the Philadelphia Chapter of the American Institute of Architects was presented to Dr. A. A. Hamerschlag, director of industrial research for the general staff of the Army, with the explanation that the report indicated the possibility of a valuable service being rendered to the Government by the architects of the country, and that what was needed was direction of the effort by the Government.

Dr. Hamerschlag presented the matter to the general staff, and then to Mr. Baruch of the War Industries Board, to Mr. Eidlitz of the Industrial Housing and Transportation Bureau of the Department of Labor, and to Assistant Secretary of War, Benedict Crowell. All agreed that such surveys were of vital importance, and well-nigh essential to the intelligent solution of problems which confronted the Construction Division, the Housing Bureau of the Department of Labor, the Ordnance Department, the Bureau of Storage and Traffic, and the Motor Transport Division.

There is seen in such surveys and reports, the possibility of coördinating the activities of these departments, bureaus, and divisions. Particular emphasis is laid on this possibility in connection with effecting coördination between the Department of Labor and the War Department.

It is now proposed that a conference shall be held between the heads of these various Government agencies. The view is held by many Government officials who have had the matter under consideration, that such activities should be controlled and directed by a committee of five

architects, who could maintain close touch with the various departments and bureaus thus served.

The first survey that will be required will probably be one of the Baltimore district, where there is now great congestion of traffic and a bad road-system, and tremendous industrial expansion.

Housing in Washington

The three buildings to be erected on the plaza fronting the Union Station for the housing of women, will be designed by Waddy B. Wood, of Washington. The houses to be erected for Navy Yard workers in the southeast section of Washington will be designed by York & Sawyer, of New York City. Messrs. Donn & Deming, of Washington, will design the houses for Indian Head.

Further housing accommodations are to be held temporarily in abeyance, pending future developments.

Housing in Oregon

At its last meeting the Oregon Chapter devoted itself to a discussion of the serious shortage of houses with which Portland is threatened and took action as follows:

Resolved, That the Oregon Chapter of the American Institute of Architects hereby offers its services in an advisory capacity, without cost, during the war, to all Portland organizations interested in the housing problem; and be it further

Resolved, That the Housing Committee of the Oregon Chapter of the American Institute of Architects be hereby instructed to gather and present all information at its disposal to the public and to any Portland organization asking for professional advice on housing matters. Should actual maps, layouts, and plans be needed at the minimum cost for the success of any approved housing venture, then the above committee is hereby instructed to report back to the Chapter, which will attempt to secure such maps, layouts, and plans, at net cost of production; and be it further

Resolved, That this offer be extended to all other communities in the State of Oregon and to the environs of Portland.

Selling Stock Company Architectural Service

The American Security and Investment Company of Duluth, Minn., has issued a circular of information in reference to shares of stock in the Shurick & Hansen Co., Inc., also of Duluth. In a circular issued by the "S. & H." Company itself, it is explained that the company "employs three experts who will travel over the territory which comprises the states of Georgia, Alabama, Tennessee, Florida, Kentucky, Louisiana and Mississippi. These men deliver the lectures (designed to influence communities to build better schools) and also remain in the district until the project is well under way. They lay out the site, arrange the sanitation and suggest the size, type, and cost of the new structure. In short, they create new work, and, when this has been accomplished, they turn the actual technical work over to the architect who controls the territory in which the new school is located."

It is not our task to present a comprehensive analysis of the figures submitted for the purpose of inducing investors to subscribe to the stock in the "S. & H. Service," although it might be a kindness to do so. Neither is it our duty to make any suggestions to architects. But we feel it important that, in respect to the statements made that Mr. Edward P. Shurick is also a special Collaborator of the Bureau of Education, United States Government, and that the Department of Education has endorsed the work of the "S. & H. Service," those who are interested should ask for a verification of these statements by the Department of Education, Department of the Interior, Washington, D. C. We are credibly informed that these representations are not in accord with the facts.

Civil Service Examinations for Architects

The Civil Service announce following examinations in connection with vacancies in the Construction Division of the War Department at Washington, D. C.

Architect, $2,500 to $3,500 a Year

The duties of this position will consist of the designing of housing, hospitals, cantonment buildings, theaters, refrigerating plants, warehouses, and other projects. Each appointee will have charge of a group of draftsmen and will be responsible for their work.

Applicants must have graduated in architecture from a college or university of recognized standing and have had at least twelve years' practical experience in responsible charge of the designing and supervision of architectural work. The experience must be such as to indicate ability to take complete charge of from twenty to thirty architectural designers and draftsmen.

Structural Designer, $2,400 to $2,700 a Year

The duties of appointees will be to design heavy wood-frame mill and warehouse construction, light steel-frame buildings, and reinforced concrete warehouses; also to design power-houses, boiler-houses, and special construction for the housing of manufacturing machinery and equipment. Each appointee will be placed in charge of a squad of men in the drafting-room and will be responsible for the designs in his charge.

Applicants must have graduated in civil or architectural engineering from a college or university of recognized standing, and have had at least eight years' experience in structural designing, particularly in heavy mill and warehouse construction, including problems involving a great variety of heavy frame building construction.

Architectural Designer, $2,100 to $2,700 a Year

The duties of appointees to this position will be to design and have charge of various housing problems and to prepare plans and specifications of material for hospitals, power-houses, warehouses, cantonment buildings, mechanical repairing of shops, and other construction. Each appointee will have charge of a group of draftsmen and will be responsible for their work.

Applicants must have graduated in architecture from a college or university of recognized standing and have had

at least six years' office experience in responsible charge of large problems in architectural designing.

Senior Architectural Draftsman, $1,800 to $2,100 a Year

The duties of appointees will be to design and plan various wood-frame, reinforced concrete, and fireproof buildings; to develop plans for elevators from rough sketches submitted by the chief of the squad. Appointees should be capable of developing such sketches to completion.

Applicants must have graduated in architecture from a college or university of recognized standing and have had at least five years' experience involving the designing and drafting of ordinary building construction; or in lieu of such graduation at least one year's additional experience for each year lacking of such college course. In order to qualify it must appear that the experience has been such as to render the applicant familiar with the designing and drafting of ordinary building construction and the making of working drawings from rough sketches.

Junior Architectural Draftsman, $1,200 to $1,800 a Year

The duties of this position will consist of the general drafting and planning of various types of construction. Appointees will be called upon to design wood-frame structures in connection with cantonments and to assist senior architectural draftsmen in the completion of work in their charge.

Applicants must have graduated in architecture from a college or university of recognized standing and have had at least one year's experience in the making of working drawings; or in lieu of such graduation at least one year's additional experience for each year lacking of such college course.

Architectural Tracer, $1,000 to $1,200 a Year

The duties of appointees to this position will be to complete all working drawings in ink after they have been designed and carried to completion by the architect in charge of the squad; also to do various tracings of mechanical, electrical, and civil engineering drawings.

Applicants must have graduated from a standard high school or have completed a course of study equivalent to that required for such graduation, and have had at least two years' experience as tracer in an architect's office.

Applicants must not have reached their fifty-fifth birthday on the date of making oath to the application.

Applicants must submit with their applications their photographs, taken within two years, with their names written thereon. Tintypes or proofs will not be accepted.

Applicants will be admitted to these examinations regardless of their residence and domicile; but only those who have been actually domiciled in the state or territory in which they reside for at least one year previous to the date of making oath to the application, and who have the county officer's certificate in the application form executed, may become eligible for permanent appointment to the apportioned service in Washington, D. C. Positions in the Construction Division of the War Department are in the nonapportioned service.

On account of the urgent needs of the service, applications will be received until further notice. Papers will be rated promptly and certification made as the needs of the service require.

These examinations are open to all male citizens of the United States who meet the requirements.

Applicants should at once apply for Form 1312, stating the title of the examination desired, to the Civil Service Commission, Washington, D. C.; the Secretary of the United States Civil Service Board, Customhouse, Boston, Mass., New York, N. Y., New Orleans, La., Honolulu, Hawaii; Post Office, Philadelphia, Pa., Atlanta, Ga., Cincinnati, Ohio, Chicago, Ill., St. Paul, Minn., Seattle, Wash., San Francisco, Calif.; Old Customhouse, St. Louis, Mo.; Administration Building, Balboa Heights, Canal Zone; or to the Chairman of the Porto Rican Civil Service Commission, San Juan, P. R.

Applications should be properly executed, excluding the medical certificate, and filed with the Civil Service Commission, Washington, D. C., without delay.

The exact title of the examination desired, as given at the head of this announcement, should be stated in answer to Question 1 of the application form.

Structural Service Department

On account of Mr. Boyd's duties in the new Structural Service Department of the Bureau of Industrial Housing and Transportation, Department of Labor, at Washington, D. C., the usual Structural Service Department of the Journal is of necessity omitted from this issue.

Institute Business

New Members Elected to the Institute

Baum, Dwight James, New York City, New York Chapter.
Brigham, N. R., 4922 Davenport Street, Omaha, Neb., Iowa Chapter.
Brown, J. Martin, 849 David Whitney Building, Detroit, Mich., Michigan Chapter.
Clarke, Frederick W., 682 Brandeis Building, Omaha, Neb., Iowa Chapter.
Crow, William D., 200 Fifth Avenue, New York City, New York Chapter.
Davis, Ellery L., Security Mutual Building, Lincoln, Neb., Iowa Chapter.
Goldstone, Lafayette A., 512 Fifth Avenue, New York City, New York Chapter.
Henninger, F. A., 604 Securities Building, Omaha, Neb., Iowa Chapter.
Josenhans, Timotheus, 4524 Lowman Drive, Seattle, Wash., Washington State Chapter.
Lawrie, Harry, 619 Paxton Block, Omaha, Neb., Iowa Chapter.
Mathesius, Jr., Frederick, 320 Fifth Avenue, New York City, New York Chapter.
McDonald, Alan, Omaha National Bank Building, Omaha, Neb., Iowa Chapter.
McDonald, John, Omaha National Bank Building, Omaha, Neb., Iowa Chapter.
McGoodwin, Robert R., 1422 Walnut Street, Philadelphia, Pa., Philadelphia Chapter.
Mead, Marcia (Miss), 105 West 40th Street, New York City, New York Chapter.
Prinz, George B., Omaha National Bank Building, Omaha, Neb., Iowa Chapter.
Raapke, H. A., City National Bank Building, Omaha, Neb., Iowa Chapter.
Riddle, Theodate Pope (Mrs.), Farmington, Conn., Connecticut Chapter.
Rogers, James Gamble, 470 Fourth Avenue, New York City, New York Chapter.
Sandham, Josiah Dow, World-Herald Building, Omaha, Neb., Iowa Chapter.
Steinbaugh, Charles W., Brandeis Theatre Building, Omaha, Neb., Iowa Chapter.
Stevens, Will A., 1417 Railway Exchange, Chicago, Ill., Illinois Chapter.
Woollett, William L., Berkeley, Calif., Southern California Chapter.
Youngberg, John E., 30 North Dearborn Street, Chicago, Ill., Illinois Chapter.

Resolutions of the Philadelphia Chapter on the Death of Frank Miles Day

At a special meeting of the Philadelphia Chapter, on June 29 last, held at the call of the Secretary, to do honor to the memory as well as to the distinguished professional achievements of Mr. Day, the following resolution was adopted:

"In the untimely death of Frank Miles Day the profession of architecture has lost a most distinguished member and the community a citizen of exemplary character and usefulness.

"Gifted with a scholarly mind, clear judgment, and high ideals, he rendered effective service in the advancement of art and architectural education; as an architect, his accomplishments won for him merited honor and recognition throughout this country and abroad; as a member of the American Institute of Architects, he was a potent factor in establishing and maintaining its principles and standards of practice, and to the end was devoted and untiring in his efforts to extend its influence and usefulness to the benefit and dignity of the whole architectural profession.

"With like enthusiasm, and to a rare degree for one whose professional activities were so wide and exacting, he joined with sympathetic interest in all that concerns the betterment and welfare of the community.

"It is therefore with a deep sense of personal loss that we, the members of the Philadelphia Chapter, American Institute of Architects, record this expression of our esteem and appreciation of one who was not only an honor to our profession, but in his personal relations, a kindly, cultured gentleman and friend. We unite with his associates in acknowledging the loss they have sustained, and we hereby extend to the members of his family our deep sympathy in their bereavement."